

## Kurdish ethnomedicine in the context of historic migration

Tahereh Maleki <sup>a</sup>, Marco Leonti <sup>b</sup>, Maja Dal Cero <sup>a</sup>, Ali Sonboli <sup>c</sup>, Caroline S. Weckerle <sup>a\*</sup>

<sup>a</sup> Department for Systematic and Evolutionary Botany and Botanical Garden, University of Zurich, Zollikerstrasse 107, 8008 Zurich, Switzerland

<sup>b</sup> Department of Biomedical Sciences, University of Cagliari, Cittadella Universitaria, 09042, Monserrato, (CA), Italy

<sup>c</sup> Department of Biology, Medicinal Plants and Drugs Research Institute, Shahid Beheshti University, Evin, P.O. Box 19835-389, Tehran, Iran

\*Corresponding author: Caroline S. Weckerle, [caroline.weckerle@systbot.uzh.ch](mailto:caroline.weckerle@systbot.uzh.ch)

Tahereh Maleki: [tahereh.maleki@systbot.uzh.ch](mailto:tahereh.maleki@systbot.uzh.ch)

Marco Leonti: [marcoleonti@netscape.net](mailto:marcoleonti@netscape.net)

Maja Dal Cero: [dalcero@swissworld.ch](mailto:dalcero@swissworld.ch)

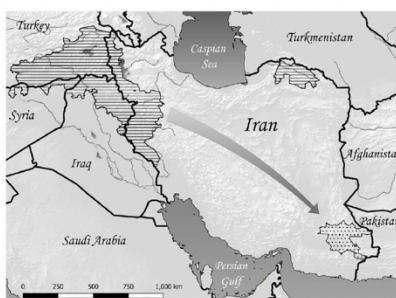
Ali Sonboli: [a-sonboli@sbu.ac.ir](mailto:a-sonboli@sbu.ac.ir)

from NW Iran



higher medicinal plant diversity

resettlement 16<sup>th</sup> to 18<sup>th</sup> centuries



continuation – disjunction –  
substitution – abandonment

to SE Iran



higher diversity in preparation  
methods and therapeutic uses

<https://doi.org/10.1016/j.jep.2024.119132>

Received 15 September 2024; Received in revised form 11 November 2024; Accepted 17 November 2024; Available online 21 November 2024

## **Abstract**

**Ethnopharmacological Relevance:** Community displacement and cultural integration influence the use of plants for medicine. This study enhances our understanding of how communities adapt their medical practices in response to environmental changes.

**Aim of the Study:** We investigate how Kurds in SE Iran (Balochi Kurds), displaced between the 16th and 18th centuries from their homeland in NW Iran, retained and adapted their medicinal knowledge.

**Materials and Methods:** Fieldwork was conducted over 12 months across 8 Kurdish municipalities in NW Iran and 3 in SE Iran, using standard ethnobotanical methods. Totally 121 people were interviewed; data were analysed at the level of use reports (UR), classifying therapeutic uses according to ICPC. Comparisons between NW and SE Iran are based on plant genera available in both regions.

**Results:** Medicinal knowledge is maintained by various practitioners, including herbalists, midwives, bonesetters, ritual healers, knowledgeable laypersons, and herb collectors/sellers in both regions. We documented 278 plant species (177 in NW Iran and 142 in SE Iran) and 4722 UR. SE Iran shows a greater variety of preparation methods, such as vaporization and suppositories. Gastrointestinal diseases are the most relevant, followed by musculoskeletal issues in SE Iran, and skin and respiratory diseases at both locations. Commonly used plants in NW Iran include *Urtica dioica* (75 UR) for female genitourinary infections and *Quercus* spp. (50 UR) for gastric ulcers. In SE Iran, *Haplophyllum canaliculatum* (83 UR) is widely used. *Pistacia atlantica* resin is widely used in both areas. The comparison reveals continuation of uses (e.g., *Mentha longifolia*), plant substitutions (e.g., *Thymus* vs. *Zataria*), new uses (e.g., *Capparis spinosa*), and the loss of certain plant uses (e.g., *Eryngium*, *Euphorbia*) among the Balochi Kurds.

**Conclusion:** The greater medicinal plant diversity in NW Iran reflects its richer biodiversity. In SE Iran, the higher diversity in preparation methods and therapeutic uses is likely due to its less developed healthcare system and more traditional lifestyle. The loss of their native language has not negatively impacted the traditional knowledge of the Balochi Kurds.

## **Keywords**

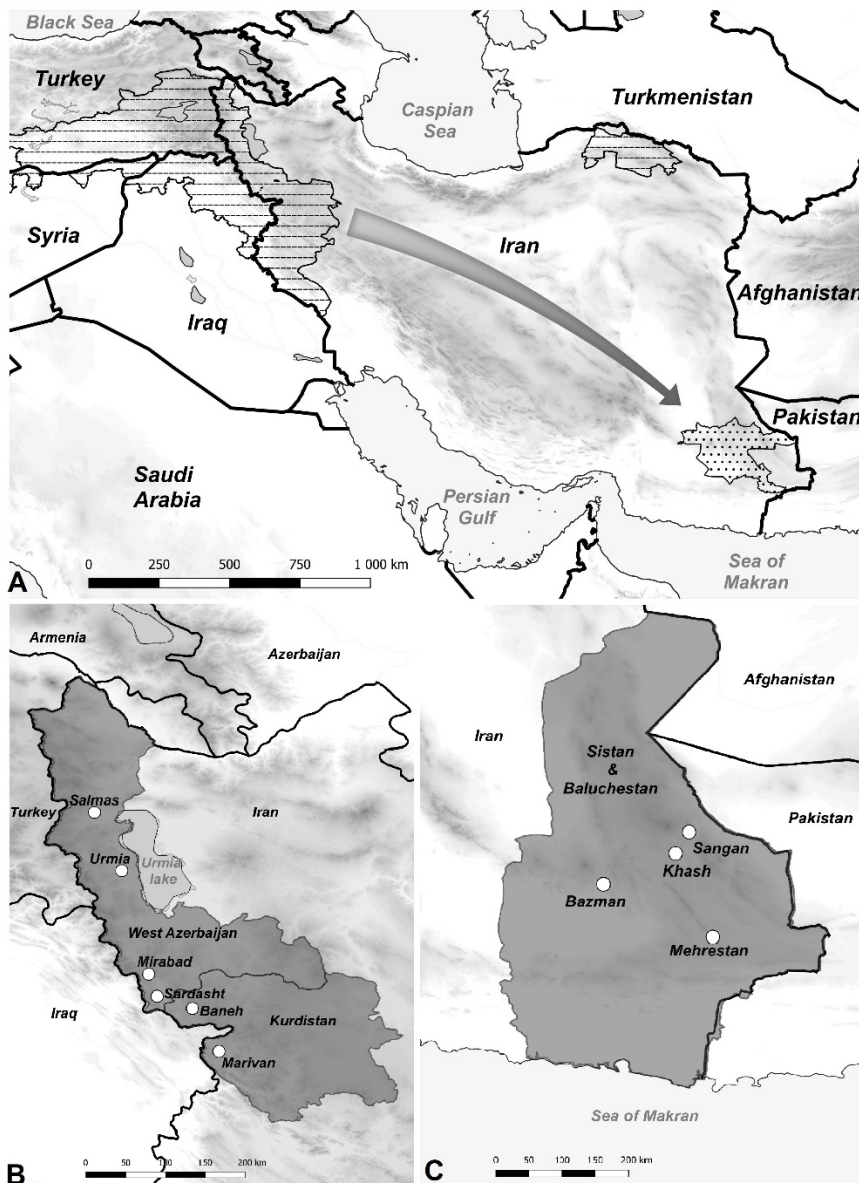
Iran, Baluchestan, Kurds, Cultural exchange, Ethnomedical knowledge, Resilience

## 1. Introduction

Iran and its surroundings (former Persia) with its multiethnic population, diversity of climates, ecologies and rich flora with ca. 8600 species of vascular plants are home to ancient herbal and medical traditions (Flattery and Schwartz, 1989; Abu-Asab, 2020; Ghahremaninejad and Nejad Falatoury, 2016). During the era of the Islamic conquest, Persian medicine, that was based on Ancient Greek, local and Ayurvedic traditions, reached its peak, contributing to the “Golden Age of Persian Science and Medicine” (8<sup>th</sup>-12<sup>th</sup> centuries CE; Abu-Asab, 2020; Nayernouri, 2015; Huyse, 1990). This historic legacy represented by folk medicine and traditional herbalism has been preserved to varying extents across Iran (Ebrahimnejad, 2004; Irannejad, 2023).

However, traditional medicine is not static but adapts to new health care needs and excludes non-efficacious or dangerous treatments which usually do not stand the test of time (e.g., Foster and Anderson, 1978; Bye et al., 1995). Assessing the changing use of therapeutic resources over time (diachronic use patterns) and varying botanical drug use allow to gain insights into the evolution of human-plant interactions. This includes answers to questions as to how herbal medicine adapts to changing epidemiology and culture (Leonti and Verpoorte, 2017), how displacement and cultural integrations impacts the use of plants for food and medicine (Pieroni and Vandebroek, 2009), how changing environments affect the use of plant drugs (Pirker et al., 2012), how acculturation and adaption to a more modern life style influence traditional medicine (Geck et al., 2016) and how the discovery of new lands and global economy conditions plant use and medicine in general (Crosby, 2003; Mann 1984; Etkin, 2006).

In this study we compare ethnomedicinal data gathered among Kurds from West Azerbaijan and Kurdistan (their native homeland in NE Iran) with data collected among Kurdish descendants from Baluchestan (SE Iran; **Fig. 1**). The Baluchestani Kurds have been resettled from northwest to southeast Iran between the 16<sup>th</sup> and 18<sup>th</sup> century. Generally, Kurds were resettled in Iran with the purpose to gain control over their power in their native homelands and to strengthen Iran's borders with their presence in far flung and sparsely populated areas (Perry, 1975; Bestor, 1979; Farzanfar, 1992; Gunter, 2020). The case of the Kurdish diaspora of SE Iran, however, is not properly documented, and we do not know how their resettlement took place (Bestor, 1979). In any case, the resettlement brought an unknown number of Kurdish people, probably in several waves, to Baluchestan (Bestor, 1979). They were moved from their pluviseasonal-continental Mediterranean homeland to live in a tropical desert climate with a vastly different flora which is the homeland of the Baloch people (Jahani, 2014).



**Fig. 1.** A) Kurds in Iran and the Middle East (striped areas) and the forced migration of Kurds to SE Iran (dotted area) between the 16th and 18th century. B) White dots indicate the study areas in NW Iran and C) SE Iran.

Kurdish herbal traditions evolved around the Kurdish homeland between the northwestern Zagros and the Eastern Taurus Mountain chains and was influenced by the different surrounding cultures and peoples such as Arabs, Armenians, Assyrians, Persians, and Turks (Miraldi et al., 2001; Tahvilian et al., 2014; Ghasemi Pirbalouti et al., 2013; Ahmed, 2017; Jafarirad and Rasoulpour, 2019). Botanical drugs derived from cultivated plants, rural flora and commercialized plant drugs are frequently used medicines in the Kurdish homeland such as cinnamon (*Cinnamomum verum* J.Presl), cloves (*Syzygium aromaticum* (L.) Merr. & L.M. Perry) or henna (*Lawsonia inermis* L.; Miraldi et al., 2001; Azizi and Keshavarzi, 2015; Jafarirad and

Rasoulpour, 2019; Hosseini et al., 2022). The Iranian Baluchestan (as opposed to the Pakistani Balochistan) lies on the crossroad between Iran, India, and Central Asia, which probably influenced local herbalism. Notwithstanding, compared to NW Iran, the SE is rather isolated within Iran. The Baloch society and the Kurdish descendants in SE Iran are organized in tribal structures. Their traditional lifestyle enforces their reliance on herbalists, healers, and herbal medicine (Sadeghi et al., 2014a). The relative scarcity of modern healthcare options in SE Iran forces patients into cumbersome, time and money consuming journeys to urban centres when visits to medical specialists are urgently needed (Maleki and Akhani, 2018). For self-limiting, chronic, and less serious health problems, Kurdish people of both areas (NW Iran and SE Iran) rely on traditional medicine. Both regions show an epidemiological situation typical for rural areas in Iran, but people in SE Iran suffer more frequently from intestinal parasites in comparison to the Kurds in NW Iran (GBD 2019 Iran Collaborators, 2022). While herbal medicine of Kurds of SE Iran has not been documented yet, there are some reports on the herbalism of the Baloch people living in Pakistani Balochistan and in Iranian Baluchestan (Goodman and Ghafoor, 1992; Maleki and Akhani, 2018; Sadeghi et al., 2014a; 2014b). These field surveys report rather complex modes of herbal preparations, the use of composed herbal formulations and a variety of characteristic topical applications (**Fig. 2**), such as ‘*chol zadan*’, which can be translated as “dig a hole”. In this practice a burrow of the size of a human body is filled with charcoal covered with herbs and leaves on which the patient is bedded for the treatment of rheumatism and pain (Maleki and Akhani, 2018).

We assume that both Kurdish groups once shared the same ethnomedical knowledge and against this historical backdrop, we ask as to what extent the trans-settled Kurds retained their medicinal system and herbal knowledge, and which aspects and knowledge were adapted and adopted from the new environment. We expect to find cases where “continuation”, “disjunction” (changing medical context), “discontinuity” (abandonment), substitution and “synchronism” (substitution of available elements with similar elements of the dominating culture) of plant and herbal drug uses took place (Bye et al., 1995). We specifically ask whether the therapeutic uses of shared plant drugs are the same and whether there is evidence pointing towards the Baluchestani Kurds having adopted uses from the Baluchi people or substituted unavailable drugs with Baluchestani or commercialized botanical drugs. We, furthermore, ask whether the differences in official health care coverage in SE Iran relative to Kurdistan, is reflected in traditional medicine. We also check whether it is possible to deduce evidence from the ethnomedicinal data that links the Kurds of SE Iran (who don’t speak Kurdish anymore) to the Kurds of NW Iran. In a wider context this

study contributes to our understanding of how human societies re-establish and readapt their medical system to a changing environment.



**Fig. 2.** A herbalist applying smoke therapy to treat skin burns caused by boiling water (SE Iran). A) Charcoal is prepared and resin of *Pistacia atlantica* and leaves of *Artemisia sieberi* added. B) The smoke is captured with a blanket and the injured skin is fumigated. Finally, *Peganum harmala* seed smoke is applied as a disinfectant. C) A mixture of warm milk and *danichk* (seed powder of *Plantago lanceolata*, imported from Pakistan) is applied on the burned skin, and D) covered with a bandage which lasts for 24 hours. The procedure is repeated for several days.

## 2. Background and Methods

### 2.1. Background

#### 2.1.1. NW Iran: Ethnographic data, epidemiology, health care services and ecology

Kurds are an ethnic group mainly living in Iran, Iraq, Syria, and Turkey (Asatrian, 2009; Bocheńska, 2018). They speak Kurdish languages, mainly Northern (Kurmanji), Central (Sorani) and Southern Kurdish belonging to the Northwestern Iranian languages (Asatrian, 2009). **Fig. 1** depicts the current Kurdish settlement areas as well as the historical movements of Kurds within Iran. Kurdish people in Iran predominantly reside in five western border provinces: West Azerbaijan, Kermanshah, Hamedan, Ilam, and Kurdistan. However, in Iran also several larger and smaller Kurdish communities exist far from the Kurdish homeland, because of relocations (**Fig. 1**). The largest of these is the Kurdish community in the northern part of Khorasan province in northeastern Iran.

For this study field research was conducted with Kurdish speaking people in the Kurdistan province of Iran, including Marivan county (Central district) and Baneh county (Nanur and Namashir districts) and in the province of West Azerbaijan, including Salmas county (Chahriq district), Urmia County (Silvaneh and Sumay-ye-Beradust district), and Sardasht county (Central and Vazineh districts), comprising an area of ca. 9000 km<sup>2</sup> (**Fig. 1**). North-western Iran has a medium to high urbanization level and a medium development index compared to all other provinces of Iran (Pilehvar, 2021; Zanjari and Sadeghi, 2022). The total population in the area is around 578,000, while the communities studied count ca. 29,000 inhabitants altogether.

In general, maternal health is under-served, neonatal disorders not well attended, and lately mental health issues cause concerns, such as depressive disorders, anxiety and bipolar disorders (GBD 2019 Iran Collaborators, 2022). A mental health survey showed that the prevalence of psychiatric disorders in Iran is relatively high while psychological issues increased especially after the end of the Iraq–Iran war in 1980–88 (GBD 2019 Iran Collaborators, 2022; Askarian et al., 2012). Health care facilities of the nearest urban centres (such as Marivan, Baneh, Urmia, Sardasht) are on average 30 km (15–60 km) away from the field study sites. The mean number of medical doctors per 100,000 inhabitants is around 30 and significantly below the mean value of the country which is 47 (Moradi et al., 2023). Larger villages (e.g., Dehpabid, Central Sangan, Hovarsin, or Silvane) harbour so-called “health-houses” (*khaneh-ye behdasht*) staffed with ‘*behvarz*’. These are healthcare workers, typically with a high school diploma and a basic training in general healthcare. They collaborate with local midwives for mother and childcare and help to identify illnesses and report to the health clinics.

The visited villages lie between 1400 and 3100 m a.s.l. The prevailing climate is Mediterranean

pluviseasonal-continental with mean winter temperatures of  $-1^{\circ}\text{C}$  and a mean summer temperature of  $25^{\circ}\text{C}$  and an average of 400 to 800 mm annual precipitation (Djamali et al., 2011). The predominant and relevant plant associations and ecological zones are 1) *Amygdalus*-shrublands and other mountain steppe shrublands (foothills, mountainous zone) with characteristic elements pertaining to the genera *Prunus*, *Crataegus*, *Cotoneaster*, *Ephedra*, *Astragalus*, *Artemisia*, *Salvia* and *Pistacia atlantica*; 2) Oak Woodlands (1000-2500 m a.s.l.) characterized by herbaceous perennials and geophytes and species of the genera *Quercus*, *Prunus*, *Cotoneaster*, *Crataegus*, *Pyrus* and specifically *Acer monspessulanum*, *Fraxinus rotundifolius*, *Pistacia atlantica*; 3) Subalpine and alpine habitats (2500-3500 m a.s.l.) characterized by subalpine tall-growing herbs and a vegetation dominated by Apiaceae (e.g., *Ferula*, *Ferulago*, *Prangos*), thorn cushion communities (e.g., *Astragalus*, *Acantholimon*, *Onobrychis cornuta*), and snowbed-communities (e.g., *Piptatherum laterale*, *Plantago atrata*, *Polygonum serpyllaceum*) (Noroozi et al., 2020).

### **2.1.2. SE Iran: Ethnographic data, epidemiology, health care services and ecology**

The province of Sistan and Baluchestan is scarcely populated and remote ranking as one of the lowest in terms of urbanization and industrial development among the Iranian provinces (Pilehvar, 2021). Historically less well-documented is the Kurdish diaspora of Baluchestan in the southeastern part of the country (Sarhad region) (Bestor, 1979; Skrine, 1931). Sarhadi Kurds' oral histories support their exile to SE Iran between the 16<sup>th</sup> and 18<sup>th</sup> century (Bestor, 1979). However, the origins and history of the Kurds of Sarhad needs further clarification and research (Boyajian-Surenians, 2007; Boyajian and Shahbakhsh, 2015). This is because the different religious affiliations, with Shia Kurds in Bazman and Sunni Kurds in Mehrestan and Khash, suggest a multiple origin of this population (Farzanfar, 1992). The Baluchestani Kurds did not conserve their native language and now speak Balochi with distinct accents specific to villages in Sangan, Mehrestan, and Bazman and identify themselves as Kurds by descendant. The Baloch are a largely tribal ethnic group inhabiting the vast arid area located between Western Pakistan (province of Balochistan), Southeastern Iran (province of Sistan and Baluchestan and parts of the provinces of Kerman and Hormozgan) and Southwest Afghanistan, known as Balochistan (**Fig. 1**; Spooner, 1988; Jahani, 2019). They live in a little developed region with low population density. Armed conflicts occur regularly due to political reasons and illegal border trafficking, which destabilizes the area. Baloch people largely practice a traditional lifestyle, relying mainly on traditional husbandry, agriculture, traditional medicine, clothing, and architecture. The

Balochs living in SE Iran speak Sarhadi and Makrani dialects of the Balochi language, which are part of the Northwestern Iranian languages (Jahani, 2019).

For this study field research was conducted with Kurdish decedents in the counties of Mehrestan (Central district), Khash (Central district) and Iranshahr (Bazman district) comprising an area of ca. 25,000 km<sup>2</sup> (**Fig. 1**) with around 4200 inhabitants in the Kurdish study sites and a total population of 256,000.

According to different healthcare rankings Sistan and Baluchestan is considered Iran's poorest province (Ahmad Kiadaliri et al., 2011; GBD 2019 Iran Collaborators, 2022; Moradi et al., 2023; Sepehrdoust, 2009). The province has the lowest availability of healthcare facilities (50% below average) and the lowest number of specialized physicians per capita (Moradi et al., 2023), the highest child mortality (Sepanlou et al., 2022), and the highest birthrate in the country (30% above average; Ahmad Kiadaliri et al., 2011). The population is exposed to infections like malaria, tuberculosis and cutaneous leishmaniasis (Askarian et al., 2012; Metanat et al., 2012; Khazei et al., 2015; Norouzinejad et al., 2016; Nasiri et al., 2022). Epidemiology is further characterized by chronic respiratory diseases, enteric infections, nutrition deficiencies, and drug abuse, influenced by the illegal opioid trafficking route from Afghanistan (GBD 2019 Iran Collaborators, 2022).

Studied field sites are on average 90 km (50-130 km) away from the closest official healthcare facilities. With around 20 medical doctors per 100,000 people Baluchestan has one of the lowest shares per capita in the country, accompanied by a lack of specialized physicians (Moradi et al., 2023). Larger villages have health-houses (*Khaneh-ye Behdasht*) staffed by *behvarz* (healthcare practitioners) but with limited capacity and expertise (personal observation by Maleki, 2021 and 2022).

The visited villages are distributed between 1200 and 3900 m a.s.l. The tropical desert climate with a mean annual precipitation below 100 mm (Djamali et al., 2011) gives rise to 1) *Artemisia* steppes (up to 2000 m a.s.l.) with scattered shrubs of *Zygophyllum atriplicoides* subsp. *eurypterum*, *Astragalus fischeri*, *Peganum harmala* and *Cousinia stocksii*; 2) Open scrub vegetation (1800-2500 m a.s.l.) characterized by *Prunus* spp. and *Pistacia* shrubs, interspersed with thorny species such as *Carthamus oxyacantha*, *Scorzonera tortuosissima*, *Salvia macrosiphon*, *Euphorbia gedrosiaca*, *Euphorbia densa*, *Rosa beggeriana*, and *Berberis integerrima*, and 3) Subalpine and alpine zones (2600-3700 m a.s.l.) dominated by a thorn-cushion vegetation with *Acanthophyllum glandulosum*, *Onobrychis cornuta*, *Acantholimon schirazianum*, *Astragalus microcephalus* (Maleki and Akhaneh, 2018; personal observation by Maleki during fieldwork in 2013-2014).

### 3.2 Data collection

Fieldwork was conducted by the first author over a period of 12 months from March to August 2021 and from February to August 2022 in a total of 11 Kurdish municipalities (**Table 1**). Data were collected using standard ethnobotanical field methods, including participant observation, semi-structured interviews, and plant documentation (Weckerle et al., 2018; Bernard, 2011; Martin, 2004). Our collaborators were chosen through snowball sampling, i.e., we approached people who were recommended by other villagers for their reliability and knowledge on traditional medicine. These included knowledgeable individuals, herbalists, midwives, bone setters, herb salespersons, and religious healers. Interviews were always based on prior informed consent and were conducted in Balochi and Kurdish languages (both Kurmanji and Sorani dialects) with the help of local translators, who translated the local languages into Persian.

A total of 121 collaborators were interviewed. Of these 52 were from SE Iran (province of Sistan and Baluchestan) and 69 from NW Iran (23 from Kurdistan and 46 from Western Azerbaijan). All interviews were recorded with a voice recorder with the permission of the interviewees. The first author worked together with local people, who helped her to gain easy access to the community and collaborators and who served as translators (Kurdish into Persian). Interview questions focused on known diseases and health problems treated, remedies and their preparation, the collection of medicinal plants and botanical drugs, vernacular names, plant parts used, therapeutic uses and preparations, including multicomponent formulations (interview questions are provided as **Supplementary Data 1**). Interviews were usually conducted at the informants' homes, on their farms, or during walks through the informants' gardens, surrounding fields and vegetation. After the interviews, all plant taxa mentioned were collected and re-checked with the interviewees before being prepared as voucher specimens.

In SE Iran, the aim was to cover the whole Kurdish area. For this purpose, well-known Kurdish elders were contacted for guidance and prior informed consent. They provided information about the cultural history and settlements of Kurds in SE Iran, which allowed to visit over 90% of all Kurdish settlements in the area. In NW Iran the first author started the field work by visiting the head of the Conservation Organization of the Environment in Sardasht and professors at the Research and Training Centre for Agriculture and Natural Resources of the province of West Azerbaijan (<https://azargharbi.areeo.ac.ir/>). Their support facilitated contact to herbalists and local people in the villages. Initially, the focus was on areas rich in vegetation and traditional knowledge on medicinal plants. But, since the exact origins of the Kurds in SE Iran are not known, and several migration routes have been proposed, additional areas were included, to

possibly cover the whole Kurdish area. Data collection in NW Iran was influenced by willingness of local people to share their knowledge with a non-Kurdish female researcher, security issues (the area is known for sporadic unrests). Other criteria were our focus on areas previously not considered by ethnobotanical investigations, and the avoidance of areas with high urbanization and lack of vegetation due to aridification or overgrazing. Except for few settlements, the first author was able to establish a trustful relationship with the Kurds.

**Table 1.** Visited villages with total number of interviewees.

<b>Provinces</b>	<b>NW Iran (n=69)</b> <b>Kurdistan (23), Western Azerbaijan (46)</b>	<b>SE Iran (n=52)</b> <b>Sistan and Baluchestan (52)</b>
<b>Municipalities Villages</b>	<b>Sumay-ye Beradust (25)</b> Agh Saghal (3), Godal (1), Hovarsin (11), Kalas (1), Kharegoosh (3), Omar abad (1), Pesian (1), Sheykh Zard (1), Sousan Abad (1), Sin Abad (2)	<b>Bazman (15)</b> Bazman (2), Aliabad (5), Asankok (4), Garboudar (1) Gazk (2) Goanz (1)
	<b>Salmas (2)</b> Siavan (1), Chahrigh (1)	<b>Khash (23)</b> Khash (3), Central Sangan (3), Dehpabid (2), Doudi (3), Dumag (4), Keshek Village (1), Sangan Sofla (2), Shahrak Dorok (1), Tamin (4)
	<b>Silvaneh (1)</b> Silvaneh (1)	<b>Mehrestan (14)</b> Aziz Abad (1), Dolat Abad (1), Halkeh Behzad (1), Kalok (1), Mahani (1), Mehrestan (8), Razi (1)
	<b>Sardasht (10)</b> Yousef Abad (1), Sardasht (5), Davood abad (1), Halvy (1), Kolese Oliya (2)	
	<b>Nalas (4)</b> Mamazi (1), Nalas (3)	
	<b>Mir Abad (4)</b> Mirabad (2) Chakor (1), Gouzileh Mirabad (1)	
	<b>Marivan (20)</b> Chor (8), Dari (3), Marivan (2), Naneh (6), Sarnezhmar (1)	
	<b>Baneh (3)</b> Baneh (1), Khorea (1), Sivoch (1)	

	31 villages	22 villages
Age	35-88 years; Av.: 63.09	33-90 years; Av.: 61.61
Sex	46 Females, 23 Males	37 Females, 15 Males

### 3.3 Plant identification

Specimens were identified with the help of Flora Iranica (Rechinger, 1963-2015), Flora of Iran (Assadi et al., 1992-2018), Flora of Pakistan (Nasir and Ali, 1970-2003), Flora of Turkey (Davis 1965-1980), and Flora of Iraq (Townsend et al., 1966-1985), the MPH herbarium at Tehran and the United Herbaria Z+ZT at Zurich. Furthermore, digital online resources have been used, including web portals like global biodiversity information facility (GBIF; [www.gbif.org](http://www.gbif.org)) or Global Plants on JSTOR ([plants.jstor.org](http://plants.jstor.org)). Herbarium vouchers are deposited at the United Herbaria Z+ZT in Zurich and in the MPH Herbarium at the University of Shahid Beheshti in Tehran, Iran (MPH 2777-2903 – MPH 2946-3189). Nomenclature follows Plants of the World Online (POWO, 2024).

### 3.4 Data analysis

Data were organized in a Microsoft Excel database at the level of use reports (UR). One use report is defined as a plant drug, mentioned by an informant for a specific use. The species accumulation curves flatten for both regions and show saturation, while the UR accumulation curves flatten for SE Iran but not for NW Iran (**Supplementary Graphs 1**).

Local and Persian plant names are provided (**Supplementary Table 1**), based on field notes and audio recordings. The writing of Persian names follows the dictionary of Iranian plant names (Mozaffarian, 2010), and transcription of local plant names are given in accordance with Kurdish and Balochi transcription standards (Jahani, 2019; [kurdish.humanities.manchester.ac.uk/](http://kurdish.humanities.manchester.ac.uk/)).

For comparison purposes we classified therapeutic uses along the International Classification of Primary Care (ICPC3; Boven and Huib, 2022; Weckerle et al., 2018) with slight modifications always permitting comparability (Staub et al., 2015; Leonti and Weckerle, 2015). Categories with diseases and Persian-English translations are provided as supplementary material (**Supplementary Table 2**).

For comparability we focus on genera with more than 10 UR, to ensure that consensus and ethnotaxa are approximatively reflected. The distribution of genera is based on the Flora Iranica (Rechinger, 1963-2015) and Flora of Iran (Assadi et al., 1992-2018).

## 4. Results and discussion

### 4.1 Healthcare and practitioners – parallels and differences between NW and SE Iran

Sick individuals typically treat themselves with medicinal herbs or visit a herbalist. In case of serious health problems, a doctor is consulted if available and affordable. Both Kurdish groups know several types of local and traditional practitioners and in both areas more female practitioners were found (**Table 2**). These practitioners typically acquire their knowledge from their parents or through experiential learning over time. Their training does not involve formal education, and they may possess limited literacy.

**Table 2.** Practitioners and knowledgeable individuals in NW Iran and SE Iran.

	Total No		NW Iran		SE Iran	
	n <sub>tot</sub>	UR <sub>tot</sub>	n	UR	n	UR
<b>Practitioners</b>						
- Herbalist (21 f, 1 m)	22	1347	11	457	11	890
- Midwife (f)	15	570	8	207	7	363
- Bonesetter (m)	11	267	4	58	7	209
- Ritual healer (m)	3	33	1	2	2	31
<b>Laypersons</b>						
- Farmer and other (8 f, 17 m)	25	795	14	446	11	299
- Housewife (f)	28	841	17	379	11	462
<b>Medicinal Plant Experts</b>						
- Drug seller (5 f, 4 m)	9	547	8	423	1	124
- Drug collector (5 f, 3 m)	8	372	6	207	2	165
<b>Total</b>	121	4722	69	2179	52	2543

n<sub>tot</sub> = total number of persons; UR<sub>tot</sub> = total number of use reports; n = number of individuals; UR = number of use reports.

**Herbalists** (Pers. *tabibe mahali* means local healer; *tabib* = healer, *mahali* = local) collect botanical drugs and prepare and prescribe plant-based formulations and therapies upon request. They have general knowledge of diseases and sometimes they are specialized to treat specific health problems, such as haemorrhoids (e.g., male herbalist in Yousef kal, Kurdistan) or burns (e.g., female herbalist in Mamkaveh, Kurdistan). Their knowledge may overlap with that of midwives, bonesetters and ritual healers. In both regions herbalists rely much on remedies derived from *Pistacia atlantica* resin for treating skin problems. In NW Iran the herb of *Mentha*

*longifolia* was most frequently reported for female genitourinary infections and respiratory problems and in SE Iran the leaves of *Artemisia kermanensis* for diarrhoea and gastric pain.

**Midwives** (*mama*) prescribe plant-based therapies useful in the context of childbirth and for gynaecological problems. They do checkups, give massages to pregnant women and try to predict the onset of labour. Not all midwives encountered in NW Iran use plant-based medicines. Some only give massages or calculate the probable date of birth. Also, in NW Iran midwives are sought after by women who do not get pregnant and are afraid of infertility, which was much less the case in SE Iran. In SE Iran, the use of resin of *Pistacia atlantica* and the leaves of *Salvia mirzayanii* to treat postpartum complications and uterine infections has been most frequently reported, while, in NW Iran, flowers of *Alcea xanthochlora* and leaves of *Plantago major* are typically used for treating vaginal infections, infertility, postpartum complications such as continuous bleeding, uterine infections and menstruation problems. The plant-based medicines are applied orally or in form of a bath.

**Bonesetters** (Kurdish *shekasteband*; *band* = tie; *shekaste* = fractured; *shekaste band* means someone who ties fractured parts; Balochi *hadband*; *had* = bone; *band* = tie) are men who treat bone fractures, dislocations, muscular ailments, arthritis, rheumatism and varicose veins. Not all bonesetters use plant-based therapies but may exclusively rely on massage and chiropractic techniques, which is especially so in NW Iran. In SE Iran bonesetters reported a considerably higher number and higher diversity of plant-based remedies with respect to NW Iran. In both regions resin of *Pistacia atlantica* was the most frequently reported plant drug for skeletomuscular diseases.

**Ritual healers** (*sheikh*, *mamousta*, *khalifeh* in NW Iran; *mola* in SE Iran) are men who are consulted for health problems believed to result from interactions with spirits (e.g., *jinns*), affected by evil eye, psychological problems and headaches. In NW Iran ritual healers also handle skin problems like *balukeh* (warts) and *kharkaneh* (flaky red dry skin or sometimes wet injuries on the face, probably dermatitis or eczema). In SE Iran *gedroun* (fungal infection) is treated by ritual healers. They work with plant drugs, minerals and rituals. In NW Iran, people strongly believe in sacred sites, such as sacred groves and holy trees, thought to heal diseases, mental problems, spiritual and psychological distress, and female infertility. Generally, in SE Iran sacred sites are less important, but Balochs – as well as Kurds in SE Iran – do use spiritual healing practices and consider *jinns*, *sehir* (sorcery), and *gwats* (wind spirits) as possible causes of illnesses.

**Knowledgeable laypersons** are mostly women, who are respected for their medicinal plant knowledge. They mainly treat their children and family members, typically for gastrointestinal

problems. They inherit the knowledge from their mother or grandmother or accumulate knowledge through experiential learning over time. In NW Iran, they often have expertise on gastrointestinal disorders and skin diseases and rely much on remedies prepared from the fruits of *Rosa canina* (rose hips) for kidney problems and the leaves of *Mentha longifolia* for respiratory ailments. In SE Iran, laypeople are knowledgeable about gastrointestinal disorders, musculoskeletal, and respiratory ailments. They use frequently the fruits of *Pistacia atlantica* and the leaves of *Salvia mirzayanii* for gastrointestinal and kidney problems, whereas skin ailments are treated exclusively by herbalists.

An often-mentioned paediatric illness in SE Iran is 'hizeh'. It may be identified as gastroenteritis as it is associated with fever, diarrhoea and vomiting. 'Hizeh' is treated with an orally applied decoction, or a bath made from the areal parts of *Plocama eriantha*, *Artemisia kermanensis*, *Pulicaria gnaphalodes*, *Salvia santolinifolia*, *Teucrium stocksianum*, *Achillea eriophora*, and *Achillea wilhelmsii*.

**Herb collectors and sellers** have a general knowledge about botanical drug properties. Especially in NW Iran women engage in this activity to secure additional income. Herb collectors also collect herbs for pharmaceutical companies. Representatives from these companies ask collectors to collect specific plant drugs, for instance, flowers of *Alcea xanthochlora*, which are later used for cosmetic products such as shampoo. In these specific cases the herb collectors are, however, often not aware of the purpose the collected drugs are used for.

#### **4.2. Ethnomedicinal preparations in NW and SE Iran**

In SE Iran, practitioners employ a more complex array of preparation methods, including the unique 'chol' technique, i.e., direct thermic vaporization on charcoal, used by Baloch and Balochi Kurds for treating rheumatism with herbs like *Salix acomophylla* and *Salvia abrotanoides*. In contrast, Kurds in NW Iran primarily use simpler methods, such as infusions, decoctions, and poultices made from herbs like *Urtica dioica* and *Arctium lappa* for pain relief and rheumatism. The 'chol' method reflects a potential cultural exchange between the Baloch and Balochi Kurds. The Balochi Kurds adopted the use of suppositories (called 'Balochi drugs') from their Baloch neighbours. For the preparation of suppositories sheep butter is used as an extractant and excipient and boiled together with the herbs of *Artemisia kermanensis*, *Haplophyllum virgatum*, *Achillea eriophora*, resin of *Pistacia atlantica* and other bitter drugs. 'Balochi drugs' are used, amongst others, to treat female infertility, uterine prolapse and haemorrhoids. While ointments and oil-based preparations are common in both regions, products in SE Iran are more diverse and show a higher complexity with many so-called yellow oils, made from sheep milk fat. In NW

Iran olive oil is preferentially used as an excipient. Additionally, in SE Iran the use of ointments is extended to a broader range of conditions, including headaches, arthritis, paediatric issues, and cancer, while the treatment of burns, scars, and gynaecological problems with ointments is common in both regions.

Plant ashes used as remedies for treating skin conditions were observed in NW Iran and SE Iran. In SE Iran, the ashes of *Salvia mirzayannii* leaves and *Myrtus communis* leaves are applied to wounds and burns while the ashes of *Centaurea solstitialis* flowers were used to treat a condition known as *Kharkane* or *Houshke Biru*, characterized by flaky red skin. In NW Iran, the ash from *Pistacia atlantica* twigs is topically applied for haemorrhoids and warts. Both groups also used ashes for dental pain relief. Specifically, in SE Iran, ashes from woody parts of *Eurypterum* sp. are mixed with salt and water and used for dental pain and brushing teeth, whereas in NW Iran, *Daphne mucronata* twig ash was used for dental pain and allergic dermatitis.

Smoke and incense are used for allergic dermatitis, allergic conjunctivitis, skin issues, colds, and ritual purposes both in NW and SE Iran. In NW Iran, the smoke of *Hyoscyamus niger* seeds is used to treat infected teeth, eye itching, allergic conjunctivitis as well as oral and ophthalmic helminthic infestations. Similarly, in SE Iran, the seeds of *Hyoscyamus pusillus* are burned and the smoke topically applied for dental pain with both, Balochi Kurds and Balochs using this treatment. The smoke of burnt *Peganum harmala* seeds is used in both regions for treating colds and warding off evil eye. The smoke of *Pistacia atlantica* resin is used to treat uterine rupture, uterine prolapse, and allergic conjunctivitis in NW Iran, whereas in SE Iran, it is used for infections, burns, earaches, scars, postpartum infections, and bladder infections.

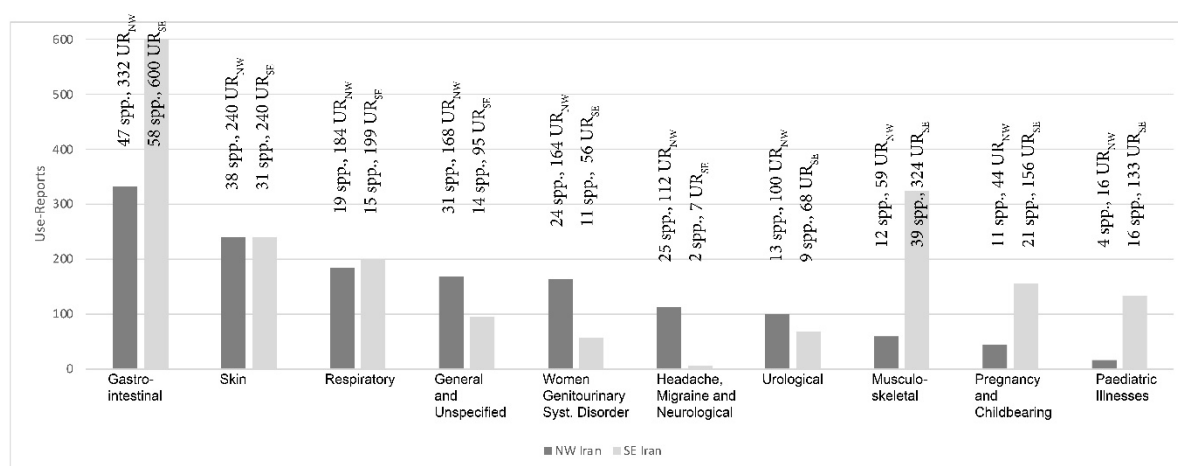
Myiasis, a common health complication in SE Iran is caused by the larvae of a fly called 'samah' developing in the upper nose (nasal myiasis) or underneath the eyelids (ophthalmomyiasis). This infection is associated with animal husbandry and can cause coughing, throat itching, a runny nose, and irritation of the eyes. The smoke of the endemic plant species *Psammogeton stocksii* is used to treat the allergic symptoms caused by this parasitosis. For treating a fungal skin infection locally known as 'gedrun', the smoke of *Zataria multiflora* leaves is applied.

### **4.3. Medicinal plants and their uses**

#### ***Main use categories in NW Iran and SE Iran***

Both in NW and SE Iran gastrointestinal diseases are the most important category of use, followed by musculoskeletal diseases in SE Iran, and skin and respiratory diseases in both sites (**Fig. 3**). The number of use reports and species for gastrointestinal disorders and musculoskeletal ailments are relatively higher in SE Iran compared to NW Iran. Uses for headache and migraine

had a higher share in NW Iran and were associated with more species compared to SE Iran. The local people associate headaches with climatic conditions, especially with the cold weather in NW Iran (Farhadi et al., 2016). According to the literature, psychological problems are more frequent in NW Iran and can be traced back to the Iran-Iraq war of 1980-88 (GBD 2019 Iran Collaborators, 2022; Askarian et al., 2012). This could also be one of the reasons for the frequently mentioned headaches. In SE Iran, people face nutritional deficiencies, which can have a negative impact on bone health and contribute to the high prevalence of musculoskeletal problems (GBD 2019 Iran Collaborators, 2022).



**Fig. 3.** Main ailment categories in NW and SE Iran (species with more than 3 UR are included in the matrix for the graph).

### ***Main plant drugs used in NW and SE Iran***

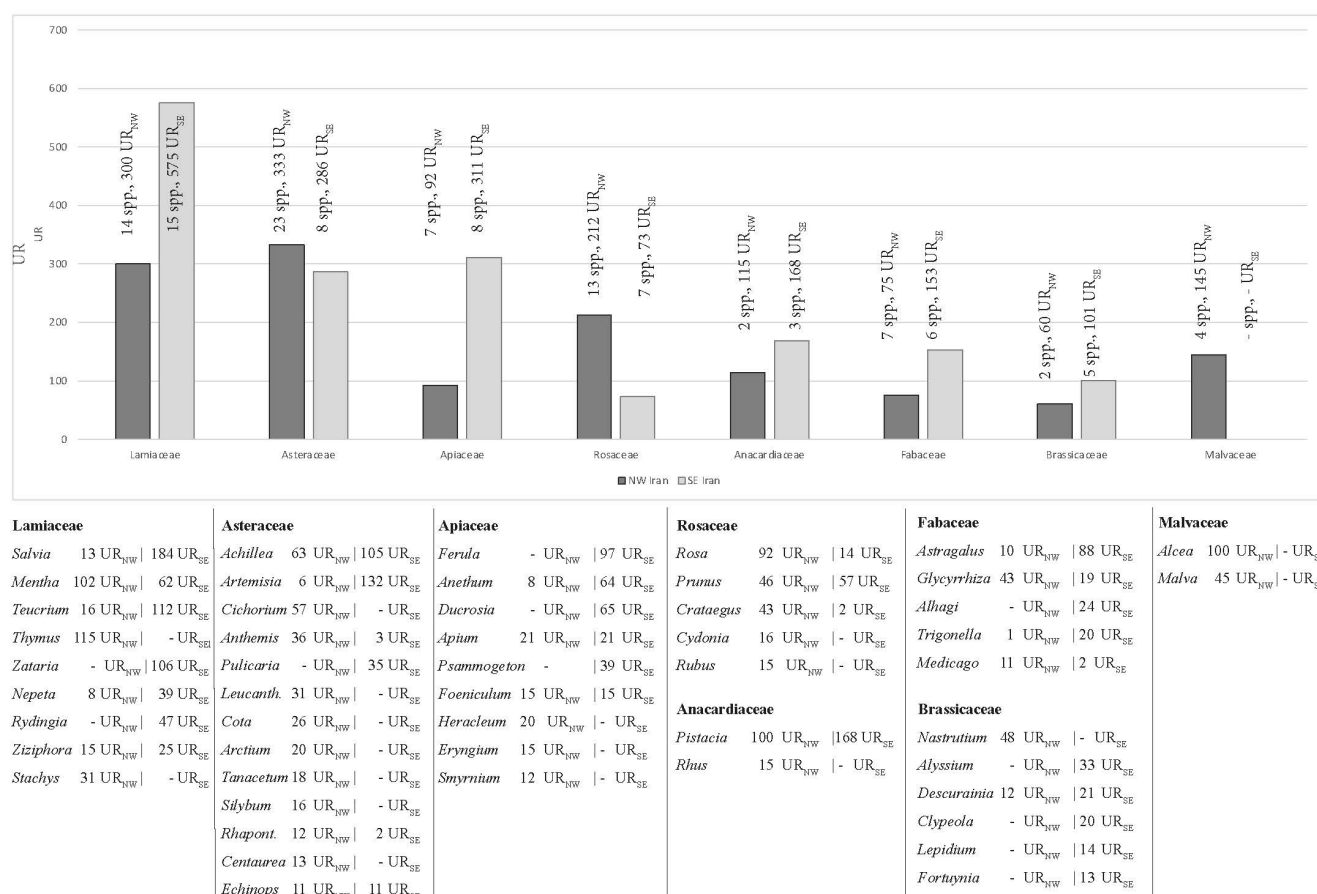
Overall, plant drugs associated with 278 species (192 genera; 71 families) and 4722 use reports (UR) were documented. Information on 177 species including 2179 UR collected from 69 informants in NW Iran and data on 142 species obtained in collaboration with 52 informants reporting 2543 therapeutic uses from SE Iran constitute the main quantitative data (**Supplementary Table 1**). Informants from NW Iran reported an average of about 35 uses associated with plant derived remedies while those from SE Iran an average of about 49 uses. The higher number of use reports per informant in SE Iran seems to reflect the more traditional setting and dependence on local resources including traditional medicines.

The use of Rosaceae species in NW Iran and that of Apiaceae species in SE Iran characterize the differences of the medical floras (and flora overall) which are otherwise dominated by Asteraceae and Lamiaceae in both areas (**Fig. 4**). The most frequently reported drugs from NW Iran were leaves of *Urtica dioica* with 75 use reports (UR), used mainly for female genitourinary infections,

and fruits of *Quercus* spp. (50 UR) used for gastric ulcers. Both species are not naturally found in SE Iran.

In SE Iran, *Haplophyllum canaliculatum* (83 UR), was reported for an exceptionally wide range of therapeutic uses related to different plant parts such as fruits, leaves, inflorescences, and aerial parts. The drugs are applied for gastrointestinal and respiratory disorders, musculoskeletal, as well as pregnancy related problems. Leaves of *Salvia mirzayanii* (127 UR), leaves of *Artemisia kermanensis* (126 UR) and aerial parts of *Teucrium stocksianum* (100 UR) were other drugs frequently mentioned and primarily employed to treat diarrhoea and stomach aches. Leaves of *Zataria multiflora* (106 UR) are commonly used for respiratory problems.

For the comparison of the medicinal plant knowledge between the two Kurdish groups the availability of drugs in their home areas is relevant. Of the totally 103 genera with more than 10 use reports 41 are available in both field study sites (37 grow naturally in both sites), 33 exclusively in NW Iran, and 29 only in SE Iran. **Table 3** shows the occurrence and use of these genera in both regions and **Table 4** provides the details on how the species of the shared genera are used in both places. Both tables form the basis for the following discussion.



**Fig. 4.** Most cited families, genera, and number of species in NW and SE Iran.

*Pistacia atlantica* is widely used in both regions for a wide range of conditions (**Table 4**). Frequently, the resin is applied for gastrointestinal, skin and musculoskeletal disorders and its use has previously been widely documented among Kurds and Baloch (Ahmed, 2017; Maleki and Akhani, 2018). The resin is rich in a variety of terpenoids, flavonoids, phenolic compounds, fatty acids, tocopherols and phytosterols and has been extensively studied phytochemically and pharmacologically for its antimicrobial, antifungal, and anti-inflammatory activities (Ahmed et al., 2021). The collection of resin and exudates (mainly derived from *Ferula* spp. and *Pistacia* spp.) is characteristic for SE Iran and adjacent areas. It is a time-consuming traditional practice which involves the collection, repeated boiling and cleaning, and the professional processing of the residue and its dissolution in fat from sheep milk (yellow oil) before the drug can be applied (Mahendra and Bisht, 2012; Langenheim, 2003). We found a higher share of therapeutic indications for the treatment of intestinal parasites in SE Iran (33 UR) with respect to NW Iran (12 UR), reflecting the available epidemiological data (GBD 2019 Iran Collaborators, 2022). However, we have found no indications for the treatment of tuberculosis and cutaneous leishmaniosis in SE Iran, but three use reports related to the treatment of malaria.

**Table 3.** Shared genera (>10UR) between the two study areas.

FAMILY	GENUS	used	occ.	FAMILY	GENUS	used	occ.
Amaranthaceae	<i>Haloxylon</i>			Fagaceae	<i>Quercus</i>		
Amaryllidaceae	<i>Allium</i> <sup>b</sup>			Iridaceae	<i>Crocus</i> <sup>c</sup>		
Anacardiaceae	<i>Pistacia</i> <sup>b</sup>			Juglandaceae	<i>Juglans</i> <sup>c</sup>		
	<i>Rhus</i>			Lamiaceae	<i>Salvia</i>		
Apiaceae	<i>Anethum</i> <sup>c</sup>				<i>Mentha</i>		
	<i>Apium</i> <sup>c</sup>				<i>Teucrium</i>		
	<i>Ducrosia</i>				<i>Nepeta</i>		
	<i>Elwendia</i>				<i>Thymus</i>		
	<i>Eryngium</i>				<i>Ziziphora</i>		
	<i>Ferula</i>				<i>Stachys</i>		
	<i>Foeniculum</i> <sup>c</sup>				<i>Zataria</i>		
	<i>Heracleum</i>				<i>Rydingia</i>		
	<i>Psammogeton</i>			Lauraceae	<i>Cinnamomum</i> <sup>a</sup>		
	<i>Smyrniun</i>			Loranthaceae	<i>Loranthus</i>		
Apocynaceae	<i>Apteranthes</i>			Lythraceae	<i>Lawsonia</i> <sup>a</sup>		
	<i>Rhazya</i>				<i>Punica</i> <sup>c</sup>		
Asteraceae	<i>Achillea</i>			Malvaceae	<i>Alcea</i>		
	<i>Anthemis</i>				<i>Malva</i>		
	<i>Arctium</i>			Moraceae	<i>Morus</i> <sup>c</sup>		
	<i>Artemisia</i>			Myrtaceae	<i>Myrtus</i>		
	<i>Centaurea</i>			Nitrariaceae	<i>Peganum</i>		
	<i>Cichorium</i>			Oleaceae	<i>Olea</i> <sup>b</sup>		
	<i>Cota</i>			Papaveraceae	<i>Papaver</i>		
	<i>Echinops</i>				<i>Fumaria</i>		
	<i>Helichrysum</i>			Plantaginaceae	<i>Plantago</i> <sup>b</sup>		
	<i>Leucanthemum</i>			Polygonaceae	<i>Rheum</i>		
	<i>Onopordum</i>				<i>Rumex</i>		
	<i>Pulicaria</i>				<i>Pteropyrum</i>		
	<i>Rhaponticum</i>			Portulacaceae	<i>Portulaca</i>		
	<i>Scorzanera</i>			Pteridaceae	<i>Adiantum</i>		
	<i>Silybum</i>			Ranunculaceae	<i>Nigella</i> <sup>c</sup>		
	<i>Tanacetum</i>			Rosaceae	<i>Rosa</i> <sup>b</sup>		
Arecaceae	<i>Phoenix</i> <sup>c</sup>				<i>Prunus</i>		
Berberidaceae	<i>Berberis</i>				<i>Cydonia</i> <sup>b</sup>		
Boraginaceae	<i>Anchusa</i>				<i>Crataegus</i>		
Brassicaceae	<i>Alyssum</i>				<i>Rubus</i>		
	<i>Clypeola</i>			Rubiaceae	<i>Plocama</i>		
	<i>Descurainia</i>				<i>Rubia</i>		
	<i>Fortuynia</i>			Rutaceae	<i>Haplophyllum</i>		
	<i>Lepidium</i>			Salicaceae	<i>Salix</i>		
	<i>Nasturtium</i>			Scophulariaceae	<i>Verbascum</i>		
Capparaceae	<i>Capparis</i>			Solanaceae	<i>Hyoscyamus</i>		
Caryophyllaceae	<i>Silene</i>				<i>Withania</i>		
Cucurbitaceae	<i>Citrullus</i> <sup>b</sup>			Tamaricaceae	<i>Tamarix</i>		
Ephedraceae	<i>Ephedra</i>			Thymelaeaceae	<i>Daphne</i>		
Euphorbiaceae	<i>Euphorbia</i>			Urticaceae	<i>Urtica</i>		
Fabaceae	<i>Alhagi</i>			Violaceae	<i>Viola</i>		
	<i>Astragalus</i>			Zingiberaceae	<i>Curcuma</i> <sup>a</sup>		
	<i>Glycyrrhiza</i>				<i>Zingiber</i> <sup>a</sup>		
	<i>Medicago</i> <sup>c</sup>			Zygophyllaceae	<i>Tribulus</i>		
	<i>Trifolium</i> <sup>b</sup>				<i>Zygophyllum</i>		
	<i>Trigonella</i> <sup>b</sup>						

**a:** genus not growing naturally but cultivated or bought from the market; **b:** genus collected from the wild and from cultivation; **c:** genus occurring in the wild, but used only from cultivation; **black:** genus used/occurring in both sites; **grey:** genus used/occurring in NW Iran; **light grey:** genus used/occurring in SE Iran; **white:** genus not occurring.

**Table 4.** Species ( $\geq 3UR$ ) of the shared genera and their uses.

Genus Species	UR <sub>tot</sub>	Occ.	Apotropaic	Blood	Cardiovascular	Dental problems	Diabetes	Ear	Environmental	Eye	Fever	Gastrointestinal	General and Unspecified	Goiter	Headache, Migraine, Neurological	Insect and Parasite	Men genitourinary system	Musculoskeletal	Paediatric illnesses	Pregnancy and childbearing	Respiratory	Skin	Tonica	Urological	Venomous Animal Bites	Women genitourinary system
<b><i>Pistacia</i> (Anacardiaceae)</b>	<b>268</b>																									
<i>Pistacia atlantica</i>	264		a	a	a		a			b		a,b,c	a		a		a	a,c			b,c	a,b		a		a
<b><i>Salvia</i> (Lamiaceae)</b>	<b>197</b>																									
<i>Salvia mirzayanii</i>	127			a						a	a	a						a		a	a	a		a		a
<i>Salvia macrosiphon</i>	23								a		a										a					c
<i>Salvia abrotanoides</i>	20																									
<i>Salvia santolinifolia</i>	14																									
<i>Salvia nemorosa</i>	10																									
<i>Salvia bracteata</i>	3																									
<b><i>Achillea</i> (Asteraceae)</b>	<b>168</b>																									
<i>Achillea eriophora</i>	70					a					a	a						a								
<i>Achillea arabica</i>	48																						b		b	b
<i>Achillea wilhelmsii</i>	35			a		a					a	a	a		a			a								
<i>Achillea vermicularis</i>	6																									
<i>Achillea millefolium</i>	5												c											c		
<i>Achillea filipendulina</i>	4																									
<b><i>Mentha</i> (Lamiaceae)</b>	<b>164</b>																									
<i>Mentha longifolia</i>	157											a,b,c			a,c			a		a				a		









**a**, species listed for Baluchestan (Taftan) in the same use-category (Maleki and Akhani, 2018); **b**, species listed for Sarvabad (Kurdistan) in the same use-category (Hosseini et al., 2022); **c**, species listed for Zagros (Lorestan) in the same use-category (Mehrnia et al., 2021); **black**: species used/occurring in both sites; **grey**: species used/occurring in NW Iran; **light grey**: species used/occurring in SE Iran; **white**: species not used.

### *Continuation of uses*

Balochi Kurds use certain species for specific treatments, that are otherwise not used traditionally in SE Iran, but well-known among Kurds in NW Iran (**Tables 3 and 4**; Maleki and Akhani, 2018). These seem to be remnants of Kurdish herbal traditions present prior to migration. For example, a decoction of the leaves and underground parts of *Mentha longifolia* is used to treat diabetes, paediatric and respiratory diseases; seeds of *Peganum harmala* are burned and the smoke applied for respiratory and female genitourinary disorders; a decoction of the flowers of *Rosa × damascena* is drunk for gastrointestinal disorders and pregnancy related stomach ache; leaves of *Anethum graveolens* prepared as a hot infusion are used for cardiovascular disorders; the underground parts of *Glycyrrhiza glabra* applied topically are used for musculoskeletal disorders. Other examples of use continuation are the leaves of *Salix acmophylla* which are applied topically for paediatric problems, as a steam bath and orally for blood related disorders or the aerial parts of *Apium graveolens* drunk as infusion for gastrointestinal problems and headaches.

### *Evidence for plant substitutions*

At the genus level we note the substitution of *Thymus* spp. (Lamiaceae) widely used in NW Iran (115 UR) for respiratory diseases with *Zataria multiflora* (Lamiaceae) in SE Iran (**Table 3 and 4**). These taxa share main essential oil components (thymol, carvacrol, paracymene and linalool in *Thymus* spp. vs. carvacrol, thymol, carvacrol methyl-ether and linalool in *Zataria multiflora*; Mahboubi et al., 2017) which confer similar organoleptic properties. Substitutions at the species level seem to have occurred in the genera *Salvia*, *Achillea*, and *Artemisia*, amongst others (**Table 4**). For example, *Salvia nemorosa* and *Salvia bracteata* are mainly used to treat gastrointestinal disorders, musculoskeletal, and pregnancy related disorders in NW Iran, whereas *Salvia mirzayanii*, *Salvia macrosiphon*, *Salvia santoliniifolia* and *Salvia abrotanoides* are used by the Kurds in SE Iran for the same conditions.

The chemical composition of these species varies significantly even within the same species (Asgarpanah, 2021). To a certain extent though, *Salvia bracteata* and *Salvia santoliniifolia* (alpha-pinene as the main component) as well as *Salvia nemorosa* and *Salvia macrosiphon* (beta-caryophyllene and germacrene D) show similarities. This relates only to essential oil

components, which are well known to vary among plant populations, and not to the overall chemical profile (Asgarpanah, 2021). Comparable patterns can be found for *Achillea* spp. which are used for a variety of health conditions, especially for gastrointestinal disorders (**Table 4**). In NW Iran *Achillea arabica*, *Achillea filipendulina*, *Achillea millefolium*, and *Achillea vermicularis* are used and seem to have been substituted by the Kurds in SE Iran with *Achillea eriophora* and *Achillea wilhelmsii*.

### ***Adoption of Balochi knowledge***

Some taxa which occur in both regions, are exclusively used in SE Iran by both the Kurds and the Balochs (**Table 3 and 4**). These uses might have been adopted by the Kurds after their migration. Examples are the fruits of *Capparis spinosa* and the whole plant of *Rubia tinctorum* which are used to treat bone fractures, or the aerial parts of *Zygophyllum fabago* externally applied against allergic dermatitis, and a decoction of fruits and flowers of *Zygophyllum atriplicoides* drunk against diabetes and kidney pain. A decoction of the seeds of *Alyssum szovitsianum* is drunk against cold and cough, and a decoction of the roots of *Berberis integerrima* to support the healing of bone fractures.

### ***Abandonment and loss of uses***

At the genus level six taxa (*Eryngium*, *Euphorbia*, *Loranthus*, *Papaver*, *Tribulus*, and *Verbascum*) are used in NW Iran only, although they also occur in SE Iran (**Table 3**). *Tribulus terrestris* and *Eryngium billardierei* are widely used by Kurds in NW Iran for urological and gastrointestinal disorders (**Table 4**). Balochi Kurds also lack specific applications commonly found in NW Iran of plant drugs they otherwise frequently use. In SE Iran we have, for example, not found the uses of seeds of *Peganum harmala* for diabetes (eventually synchronized with the use of fruits and flowers of *Z. atriplicoides*) or headaches which is common in NW Iran and neither those of the leaves of *Plantago lanceolata* for diabetes and female genitourinary conditions or those of the flowers of *Rosa × damascena* for childhood diseases, cardiovascular disorders and headaches.

## **Conclusions**

We compared ethnomedicinal knowledge of rural Kurdish communities in NW Iran with that of Kurdish descendants living in rural SE Iran (Baluchestan) since about three centuries. Kurdish descendants in SE Iran share several uses of commonly available medicinal plants with NW Irani

Kurds that are not reported from their Balochi neighbours. These uses seem to represent traditions brought over from their homelands. There are several indications that unavailable medicinal plant taxa were substituted along with their uses adopted from Balochi herbal traditions. We found also evidence for discontinuity of traditions, evidenced by uses that are common in NW Iran but not present among the Kurdish descendants in SE Iran, although the plant taxa is available there. However, in this latter case we cannot exclude divergent evolution of plant knowledge in NW Iran after the period of resettlement.

Higher biodiversity in NW Iran and proximity to cultural diversity of the Kurdish people in NW Iran explains that more medicinal species were recorded in NW Iran with respect to SE Iran. However, the diversity of modes of preparation and application and the average number of reported therapeutic uses associated with plant drugs is higher among the SE Iran Kurds. This seems to be due to the scarcely developed official healthcare system in SE Iran, the much larger distances from big urban centres and the overall more traditional lifestyle in rural SE Iran. These factors foster the reliance on traditional medicine and its specialists also for the treatment of gastrointestinal parasites and malaria. On the other hand, NW Iran is facing active urbanization of rural areas and occupational changes. The increasing demand for meat causes animal husbandry to prosper resulting in vegetational changes due to overgrazing. It seems that the ongoing process of acculturation has an exacerbating effect on the continuity of traditional ethnomedical knowledge in NW Iran while the loss of their native language appears to not have had a negative effect on the traditional knowledge of the Balochi Kurds. On the contrary, adopting the Balochi language permitted the Kurdish descendants to include traditional and time-tested Balochi medicinal knowledge into their tradition.

### **Supplementary table 1.**

<sup>1</sup>Scientific names: Species collected from NW Iran (Western Azerbaijan&Kurdistan) are marked with <sup>NW</sup>, from SE Iran (Baluchestan) with <sup>SE</sup>, and shared species from both study areas are marked with <sup>NW&SE</sup>. <sup>2</sup>Kurdish names: Names in Kurmanji language are shown with <sup>Kur</sup>, in Sorani language with <sup>Sor</sup>. <sup>3</sup>Uses: use-category [No. of use-reports: specific uses]; APT= Apotropaic, BLD= Blood, CRD= Cardiovascular, DEN= Dental complaints, DIA= Diabetes, EAR= Ear, ENV= Environmental, EYE= Eye, FEV= Fever, GNR= General and unspecified, GID= Gastrointestinal, GOI= Goiter, HEA= Headache, Migraine and Neurological, INS= Insects and Parasites, MSK= Musculoskeletal, MGS= Men genitourinary system disorders, OTR= Others, VAB= Venomous Animal Bites, PRC= Pregnancy and childbearing, PAE= Paediatric, RES= Respiratory, SKN= Skin, TNC= Tonica, URO = Urological, WGS= Women genitourinary system disorders; Uses from NW Iran are marked with NW, from SE Iran with SE; Preparation modes for each plant are shown.

Scientific name <sup>1</sup>	Persian name	Kurdish name <sup>2</sup>	Balochi name	Plant parts used	Uses <sup>3</sup>
<b>Anacardiaceae</b>					
<i>Pistacia atlantica</i> Desf. [264UR] <sup>NW&amp;SE</sup>	<i>Bane</i>	( <i>Banişt</i> , <i>Banûşt</i> ) <sup>Kur</sup> , ( <i>Qazvan</i> ) <sup>Kur&amp;Sor</sup>	<i>Góan</i>	Latex/Exudate [196UR]	<p><b>Oral</b> [85UR] (decoction, decoction in milk, decoction + additional formulation , direct thermal alteration, exudate, exudate + alteration/formulation, formulation with additives, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, infusion (hot))</p> <p><b>GID</b> [37]: constipation [3]<sup>NW</sup>, digestive [1]<sup>SE</sup>, food poisoning [1]<sup>SE</sup>, stomachache [2]<sup>NW</sup> [3]<sup>SE</sup>, gastric ulcer [6]<sup>NW</sup> [11]<sup>SE</sup>, gastroenteritis [3]<sup>SE</sup>, intestinal pain [1]<sup>NW</sup>, nausea [1]<sup>SE</sup>, dysentery [2]<sup>SE</sup>, intestinal parasites [1]<sup>NW</sup>, diarrhea [2]<sup>NW</sup></p> <p><b>GNR</b> [20]: infection [14]<sup>NW</sup> [3]<sup>SE</sup>, pain [1]<sup>SE</sup>, weight loss [2]<sup>NW</sup></p> <p><b>URO</b> [10]: kidney infection [1]<sup>SE</sup>, kidney pain [4]<sup>SE</sup>, kidney stones [4]<sup>SE</sup>, urinary tract infection [1]<sup>SE</sup></p> <p><b>PRC</b> [6]: infection in pregnancy, postpartum [4], postpartum infection</p> <p><b>WGS</b> [3]: female genitourinary infection [1]<sup>SE</sup>, uterine cysts [1]<sup>SE</sup>, uterine infection [1]<sup>SE</sup></p> <p><b>RES</b> [3]: cold [1]<sup>SE</sup>, COVID-19 [1]<sup>SE</sup>, throat infection [1]<sup>NW</sup></p> <p><b>FEV</b> [1]<sup>SE</sup>: fever</p> <p><b>SKN</b> [2]: wound [1]<sup>NW</sup> [1]<sup>SE</sup></p> <p><b>MGS</b> [1]<sup>NW</sup>: male genital infection</p> <p><b>MSK</b> [1]<sup>NW</sup>: bone fracture</p> <p><b>PAE</b> [1]<sup>SE</sup>: hizeh (see text)</p> <p><b>Topical</b> [86UR] (exudate, exudate + alteration/formulation, formulation with additives, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, ointment/pomade/oil and fat based preparations, plaster):</p> <p><b>SKN</b> [48]: scalp and hair care [1]<sup>SE</sup>, wounds [7]<sup>NW</sup> [17]<sup>SE</sup>, burns [10]<sup>NW</sup> [4]<sup>SE</sup>, hemorrhoids [1]<sup>NW</sup>, warts [1]<sup>NW</sup>, scars [2]<sup>NW</sup> [5]<sup>SE</sup></p> <p><b>MSK</b> [17]: bone fracture [6]<sup>NW</sup> [1]<sup>SE</sup>, rheumatism [1]<sup>NW</sup>, bone and joint pain [2]<sup>SE</sup>, arthritis [2]<sup>SE</sup>, contusion [1]<sup>SE</sup>, disk dislocation and hernia [4]<sup>NW</sup></p> <p><b>WGS</b> [8]: ovarian laziness [1]<sup>NW</sup>, uterine prolapse [3]<sup>NW</sup>, menstruation [1]<sup>SE</sup>, female genitourinary infection [1]<sup>NW</sup>, ovarian injury [1]<sup>NW</sup>, sticky uterine [1]<sup>SE</sup></p> <p><b>PRC</b> [5]: female infertility [2]<sup>NW</sup>, reduction of bleeding after abortion [1]<sup>SE</sup>, post-hysterotomy injury [1]<sup>SE</sup>, postpartum infection [1]<sup>SE</sup></p> <p><b>DEN</b> [4]<sup>SE</sup>: dental pain [2], dental infection /caries, tongue injury</p>

				<p><b>GNR</b> [2]<sup>SE</sup>: pain  <b>BLD</b> [1]<sup>SE</sup>: blood diluting  <b>DIG</b> [1]<sup>SE</sup>: stomachache</p> <p><b>Topical/Smoke</b> [12UR] (incense/smoke)  <b>SKN</b> [3]<sup>SE</sup>: burns, scars, wounds  <b>WGS</b> [3]: menstruation [1]<sup>SE</sup>, uterine prolapse [1]<sup>NW</sup>, uterine rupture[1]<sup>NW</sup>  <b>PRC</b> [2]<sup>SE</sup>: postpartum infection  <b>EAR</b> [1]<sup>SE</sup>: ear infection  <b>EYE</b> [1]<sup>NW</sup>: allergic conjunctivitis  <b>GNR</b> [1]<sup>SE</sup>: infection  <b>URO</b> [1]<sup>SE</sup>: bladder infection</p> <p><b>Rectal</b> [3UR] (grinding/crushing/pulverization, exudate, exudate + alteration/formulation, rectal suppository)  <b>SKN</b> [1]<sup>SE</sup>: hemorrhoids  <b>PRC</b> [1]<sup>SE</sup>: female infertility  <b>WGS</b> [1]<sup>SE</sup>: uterine prolapse</p> <p><b>Topical/Bath</b> [3UR] (decoction, direct thermal alteration)  <b>PRC</b> [1]<sup>SE</sup>: postpartum  <b>SKN</b> [1]<sup>SE</sup>: wounds  <b>WGS</b> [1]<sup>SE</sup>: uterine infection</p> <p><b>Vaginal/Uterine</b> [3UR] (exudate + alteration/formulation, grinding/crushing/pulverization)  <b>PRC</b> [3]: postpartum [1]<sup>SE</sup>, female infertility [2]<sup>NW</sup></p> <p><b>Buccal/Dental/Pharyngal</b> [2UR] (decoction, grinding/crushing/pulverization)  <b>DEN</b> [2]<sup>SE</sup>: dental pain</p> <p><b>Inhalation/Smoke</b> [2UR] (incense/smoke)  <b>GNR</b> [2]<sup>SE</sup>: infection</p>
			Fruit [46UR]	<p><b>Oral</b> [29UR] (decoction, direct thermal alteration, formulation with additives, grinding/crushing/pulverization, infusion (hot), raw, raw food formulation)  <b>GID</b> [18]: diarrhea [6]<sup>NW</sup>, gastroenteritis [1]<sup>SE</sup>, halitosis [1]<sup>NW</sup>, digestive [1]<sup>SE</sup>, gastric ulcer [6]<sup>NW</sup>, constipation [1]<sup>SE</sup>, stomachache [2]<sup>NW</sup>  <b>URO</b> [3]<sup>SE</sup>: kidney infection, urinary tract infection, kidney pain  <b>GNR</b> [4]: anabolic [1]<sup>NW</sup>, cancer [1]<sup>SE</sup>, weight loss [1]<sup>NW</sup>  <b>DIA</b> [2]: reduces blood sugar [1]<sup>NW</sup> [1]<sup>SE</sup>  <b>CRD</b> [1]<sup>SE</sup>: hyperlipidemia  <b>BLD</b> [1]<sup>SE</sup>: blood cancer</p>

					<p><b>Topical</b> [16UR] (formulation with additives, grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, oil)  <b>SKN</b> [10]<sup>SE</sup>: burns [5], scars [2], skin wounds [2], cancer gland on shoulder,  <b>MSK</b> [4]<sup>SE</sup>: bone fracture, arthritis, bone and joint pain [2]  <b>CRD</b> [1]<sup>SE</sup>: cardiovascular problems  <b>EAR</b> [1]<sup>SE</sup>: ear infection</p> <p><b>Oil</b> [10UR]  <b>SKN</b> [5]<sup>SE</sup>: burns [4]; skin wounds  <b>MSK</b> [3]<sup>SE</sup>: arthritis, bone and joint pain [2]  <b>CRD</b> [1]<sup>SE</sup>: cardiovascular problems  <b>EAR</b> [1]<sup>SE</sup>: ear infection</p> <p><b>Mastication</b> [1UR] (raw)  <b>GID</b> [1]<sup>NW</sup>: food poisoning</p>
				Leaves [19UR]	<p><b>Topical</b> [14UR] (decoction + dehydration, poultice and related preparations, plaster)  <b>MSK</b> [13]<sup>SE</sup>: arthritis, bone fracture [5], bone and joint pain [3], joint dislocation and effusion, disk dislocation and hernia [3]  <b>SKN</b> [1]<sup>SE</sup>: wounds</p> <p><b>Oral</b> [5UR] (infusion (hot), raw)  <b>GID</b> [4]: stomachache [1]<sup>NW</sup> [1]<sup>SE</sup>, gastric ulcer [2]<sup>NW</sup>  <b>PRC</b> [1]<sup>SE</sup>: postpartum infection</p>
				Woody parts [3UR]	<p><b>Rectal</b> [1UR] (combustion/ashes)  <b>SKN</b> [1]<sup>NW</sup>: hemorrhoids  <b>Topical</b> [2UR] (combustion/ashes, grinding/crushing/pulverization)  <b>SKN</b> [2]<sup>NW</sup>: warts, burns</p>
<i>Rhus coriaria</i> L. [15UR] <sup>NW</sup>	<i>Somāq</i>	( <i>Somaḫ</i> ) <sup>Kur&amp;Sor</sup> , ( <i>Tiriṣ</i> ) <sup>Sor</sup>		Fruit [14UR]	<p><b>Oral</b> [13UR] (decoction, direct thermal alteration, grinding/crushing/pulverization, infusion (hot))  <b>GID</b> [6]: acid reflux, stomachache, gastric ulcer, steatosis, diarrhea [2]  <b>CRD</b> [4]: cardiovascular problems, hypertension [2; 1: seeds], hyperlipidemia  <b>DIA</b> [2]: reduces blood sugar  <b>HEA</b> [1]: headache  <b>MSK</b> [1]: joint dislocation and effusion</p> <p><b>Topical</b> [1UR] (grinding/crushing/pulverization):  <b>SKN</b> [1]: houshkeh biro (see text), kharkaneh (see text)</p>
<b>Apiaceae</b>					
	<i>Ševîd, Šebet</i>	( <i>Šivîd, Toaq</i> ) <sup>Sor</sup>	<i>Shutk, Raz, Mèhtom</i>	Leaves [30UR]	<b>Oral</b> [25UR] (decoction, decoction + dehydration, direct thermal alteration (grill, fry, roast, heat, boil, vapor), grinding/crushing/pulverization]

<i>Anethum graveolens</i> L. [72UR] <sup>NW&amp;SE</sup>					<p><b>CRD</b> [4]<sup>NW</sup>: hyperlipidemia  <b>GID</b> [4]: gastric pain [2]<sup>NW</sup>, constipation [1]<sup>SE</sup>, gastric ulcer [1]<sup>SE</sup>,  <b>PAE</b> [3]<sup>SE</sup>: gastric pain, constipation, flatulence  <b>PRC</b> [10]: postpartum [3]<sup>NW</sup> [5]<sup>SE</sup>, induced abortion [1]<sup>SE</sup>, postpartum [1; seeds]  <b>GNR</b> [2]<sup>NW</sup>: weight loss [2]  <b>RES</b> [2]<sup>SE</sup>: cold, COVID-19</p> <p><b>Topical</b> [5] (grinding/crushing/pulverization, poultice and related preparations)  <b>GNR</b> [1]<sup>SE</sup>: pain  <b>VAB</b> [1]<sup>SE</sup>: scorpion sting  <b>SKN</b> [3]<sup>SE</sup>: burns, Infectious injury, bedsores</p>
				Fruit [39UR]	<p><b>Oral</b> [34UR]<sup>SE</sup> (decoction, infusion (hot))  <b>CRD</b> [1]<sup>SE</sup>: hyperlipidemia  <b>GID</b> [13]<sup>SE</sup>: constipation, flatulence, food poisoning, gastric and intestine infection, gastric pain[6], gastric ulcer, Intestinal pain [2]  <b>PAE</b> [1]<sup>SE</sup>: colic  <b>PRC</b> [16]<sup>SE</sup>: induction of labor [3], female infertility, induced abortion [2], postpartum [10]  <b>RES</b> [1]<sup>SE</sup>: sore throat  <b>WGS</b> [1]<sup>SE</sup>: menstruation [1]</p> <p><b>Topical</b> [1UR](ointment/pomade/oil and fat based preparations)  <b>WGS</b> [1]<sup>SE</sup>: sticky uterine</p> <p><b>Vaginal/Uterine</b> [3UR] (vaginal ovule)  <b>WGS</b> [3]<sup>SE</sup>: menstruation [2], uterine cysts</p> <p><b>Buccal/Dental/Pharyngal</b> [1UR]  <b>DNT</b> [1]<sup>NW</sup>: gingival infection</p>
				Aerial parts [3UR]	<p><b>Oral</b> [1UR] (grinding/crushing/pulverization)  <b>GID</b> [1]<sup>SE</sup>: digestive</p> <p><b>Topical</b> [2UR] (poultice and related preparations)  <b>HEA</b> [1]<sup>SE</sup>: headache  <b>PRC</b> [1]<sup>SE</sup>: postpartum infection</p>
<i>Apium graveolens</i> L. [42UR] <sup>NW&amp;SE</sup>	<i>Karafs-e Vahši</i>	( <i>Karas, Karavs, Baba risol, Karos</i> ) ( <i>Karafs</i> ) <sup>Kur</sup>	<i>Karaps</i>	Aerial parts [28UR]	<p><b>Oral</b> [16UR] (raw, hot infusion (hot), direct thermal alteration (grill, fry, roast, heat, boil, vapor), grinding/crushing/pulverization)  <b>MSK</b> [6]: bone and joint pain [1]<sup>SE</sup>, osteoporosis [1]<sup>NW</sup>, rheumatism [2]<sup>NW</sup>, joint dislocation and effusion [1]<sup>NW</sup>, arthritis [1]<sup>NW</sup>  <b>GNR</b> [3]<sup>NW</sup>: cancer, weight loss [2]  <b>BLD</b> [2]<sup>NW</sup>: blood diluting, anemia</p>

					<p><b>GID</b> [2]: flatulence [1]<sup>NW</sup>, vomiting [1]<sup>SE</sup>  <b>URO</b> [1]<sup>NW</sup>: kidney stone</p> <p><b>Topical</b> [12UR] (poultice, heated, grinding/crushing/pulverization, heated, ointment/pomade/oil and fat based preparations, thermic vaporization/aromatic vapor)  <b>MSK</b> [6]<sup>SE</sup>: arthritis, bone and joint pain [2], rheumatism, contusion [2]  <b>PRC</b> [1]<sup>NW</sup>: female infertility  <b>SKN</b> [3]<sup>SE</sup>: coagulating injury, infectious gland on skin, burns  <b>HEA</b> [1]<sup>SE</sup>: headache  <b>RES</b> [1]<sup>SE</sup>: sinusitis</p>
				Leaves [7UR]	<p><b>Oral</b> [4UR] (infusion (hot), decoction)  <b>GID</b> [1]<sup>SE</sup>: vomiting  <b>GNR</b> [1]<sup>NW</sup>: infection  <b>WGS</b> [1]<sup>SE</sup>: uterine infection  <b>RES</b> [1]<sup>SE</sup>: cold</p> <p><b>Topical</b> [3UR] (ointment/pomade/oil and fat based preparations, poultice and related preparations, thermic vaporization/aromatic vapor)  <b>SKN</b> [1]<sup>SE</sup>: cancer gland on shoulder  <b>RES</b> [1]<sup>SE</sup>: sinusitis  <b>MSK</b> [1]<sup>SE</sup>: bone and joint pain</p>
				Fruit [4UR]	<p><b>Oral</b> [4UR] (decoction, grinding/crushing/pulverization)  <b>GNR</b> [2]<sup>NW</sup>: weight loss  <b>RES</b> [1]<sup>SE</sup>: cold  <b>PRC</b> [1]<sup>SE</sup>: postpartum</p>
				Flower or Inflorescence [3UR]	<p><b>Oral</b> [3UR] (infusion (hot))  <b>HEA</b> [3]<sup>NW</sup>: dizzy, clamant/sedative, headache</p>
<i>Ducrosia anethifolia</i> (DC.) Boiss. [65UR] <sup>SE</sup>	<i>Moshgak</i>		<i>Goátak</i>	Fruit [59UR]	<p><b>Oral</b> [50UR] (decoction, infusion (hot), Infusion (milk), grinding/crushing/pulverization, direct thermal alteration (grill, fry, roast, heat, boil, vapor), decoction + dehydration)  <b>GID</b> [25]: appendicitis, flatulence [8], gastric ulcer, gastric pain [15]  <b>WGS</b> [6]: menstruation [4], uterine cysts [2]  <b>URO</b> [5]: Kidney pain [4], kidney stone  <b>CRD</b> [5]: hyperlipidemia [5]  <b>PRC</b> [4]: postpartum infection [1], postpartum [3]  <b>SKN</b> [2]: Warm temperament in the body [2]  <b>DIA</b> [1]: diabetes  <b>MSK</b> [1]: bone and joint pain  <b>PAE</b> [1]: colic</p> <p><b>Topical</b> [4UR] (grinding/crushing/pulverization, poultice and related preparations)</p>

					<p><b>DNT</b> [2]: gingival infection, dental pain  <b>WGS</b> [1]: pain in breast  <b>SKN</b> [1]: wound</p> <p><b>Vaginal/Uterine</b> [4UR] (vaginal ovule)  <b>PRC</b> [2]: postpartum  <b>WGS</b> [2]: pain in uterine, uterine prolapse  <b>Rectal</b> (grinding/crushing/pulverization)  <b>PRC</b> [1]: female infertility</p>
				Leaves [4UR]	<p><b>Oral</b> [4UR] (decoction, grinding/crushing/pulverization)  <b>RES</b> [2]: cold, COVID-19  <b>GID</b> [2]: gastric pain, diarrhea [1: sub terrestrial parts]  <b>PRC</b> [1]: postpartum</p> <p><b>Topical</b> [1UR] (poultice and related preparations)  <b>VAB</b> [1]: scorpion sting</p>
<i>Elwendia persica</i> (Boiss.) Pimenov & Kljuykov. [10UR] <sup>SE</sup>	<i>Zire Irāni, Zire</i> <i>Kermāni</i>		<i>Zire syáh</i>	Fruit [9UR]	<p><b>Oral</b> [9UR] (decoction, grinding/crushing/pulverization, grinding/crushing/pulverization, hot infusion)  <b>GID</b> [3]: gastric ulcer, hemorrhoid [2]  <b>WGS</b> [2]: menstruation  <b>CRD</b> [2]: hyperlipidemia  <b>GNR</b> [1]: weight loss  <b>RES</b> [1]: COVID-19</p> <p><b>Topical</b> [1UR] (bath)  <b>RES</b> [1]: cold [1: aerial parts]</p>
<i>Eryngium</i> <i>billardierei</i> F.Delaroche. [15UR] <sup>NW</sup>	<i>Zul</i>	( <i>Twsíyi</i> ) <sup>Kur</sup> , ( <i>Twesî</i> ) <sup>Kur&amp;Sor</sup>		Aerial parts [11UR]	<p><b>Oral</b> [9UR] (raw, hot infusion, decoction, grinding/crushing/pulverization)  <b>DIA</b> [2]: reduce blood sugar  <b>GID</b> [2]: gastric ulcer [2; 1: epidermis]  <b>GNR</b> [2]: infection  <b>RES</b> [2]: cough, sore throat  <b>CRD</b> [1]: cardiovascular problems  <b>TNC</b> [1]: increase energy  <b>WGS</b> [1]: female genitourinary infection</p> <p><b>Topical</b> [5UR] (grinding/crushing/pulverization, topical/steam bath, poultice and related preparations)  <b>SKN</b> [2]: wounds [2; 1: leaves]  <b>DNT</b> [1]: dental pain  <b>GNR</b> [1]: edema [1: all parts]  <b>WGS</b> [1]: female genitourinary infection [1: all parts]</p>

<p><i>Ferula ammoniacum</i> (D.Don) Spalik, M.Panahi, Piwczyński &amp; Puchałka. [44UR]<sup>SE</sup></p>	<p><i>Komakandal,</i> <i>Vaşa vaşaq</i></p>		<p><i>Óshterk</i> <i>Hóshterk</i></p>	<p>Latex/Exudate [38UR]</p>	<p><b>Oral</b> [15UR] (decoction, raw, direct thermal alteration (grill, fry, roast, heat, boil, vapor), decoction + dehydration, grinding/crushing/pulverization)  <b>GID</b> [8]: gastric pain, gastric ulcer [2], vomiting, intestinal parasites [4; 1: leaves]  <b>PAE</b> [2]: parasite in child  <b>PRC</b> [2]: infection in pregnancy, uterine infection  <b>GNR</b> [1]: infection [sub terrestrial parts]  <b>RES</b> [1]: COVID-19  <b>WGS</b> [1]: uterine infection</p> <p><b>Buccal/Dental/Pharyngal</b> [1UR] (grinding/crushing/pulverization)  <b>GNR</b> [1]: pain</p> <p><b>Rectal</b> [3UR] (grinding/crushing/pulverization, rectal suppository)  <b>SKN</b> [3]: hemorrhoid</p> <p><b>Topical</b> [28UR] (exudate + alteration/formulation, gel, bath, raw, plaster, poultice and related preparations, grinding/crushing/pulverization, topical/smoke)  <b>SKN</b> [20]: warm temperament in the body, wounds [16; 1: flower or inflorescence], bedsores [2], scalp and hair care  <b>MSK</b> [6]: tendinitis, vasodilating, bone fracture [3: subterrestrial parts], contusion  <b>GNR</b> [1]: pain  <b>PAE</b> [1]: pain sedative</p>
<p><i>Ferula cf persica</i> Willd. [53UR]<sup>SE</sup></p>	<p><i>Komay-e Irāni,</i> <i>sakbinj</i></p>		<p><i>Paterk</i></p>	<p>Latex/Exudate [30UR]</p>	<p><b>Oral</b> [23UR] (tablet, raw, direct thermal alteration (grill, fry, roast, heat, boil, vapor), decoction, hot infusion)  <b>GID</b> [14]: gastric and intestine infection, gastric ulcer, intestinal parasites [11; 1: oil], gastric pain  <b>GNR</b> [3]: infection [2], cancer/oncology [1]  <b>PRC</b> [3]: induction of labor, pregnancy-related palpitations, induced abortion  <b>URO</b> [2]: Kidney infection, bladder infection  <b>PAE</b> [1]: parasite in child  <b>CRD</b> [1]: hypertension</p> <p><b>Topical</b> [4UR] (grinding/crushing/pulverization)  <b>SKN</b> [3]: antiseptic, burns, wound  <b>PRC</b> [1]: induced abortion</p> <p><b>Buccal/Dental/Pharyngal</b> [1UR] (grinding/crushing/pulverization)  <b>DNT</b> [1]: dental pain</p> <p><b>Rectal</b> [1UR] (grinding/crushing/pulverization)  <b>WGS</b> [1]: menstruation</p>

				Leaves [23UR]	<p><b>Oral</b> [21UR] (decoction, direct thermal alteration (grill, fry, roast, heat, boil, vapor))  <b>GID</b> [16]: flatulence, intestinal parasites [11], gastric pain [4]  <b>GNR</b> [3]: cancer/oncology, pain, edema  <b>MSK</b> [2]: bone and joint pain, joint dislocation and effusion</p> <p><b>Rectal</b> [1UR] (grinding/crushing/pulverization)  <b>PRC</b> [1]: female infertility  <b>Topical</b> [1UR] (poultice and related preparations, heated, grinding/crushing/pulverization)  <b>GNR</b> [1]: edema</p>
<i>Foeniculum vulgare</i> Mill. [30UR] <sup>NW&amp;SE</sup>	<i>Rāziāne</i>	( <i>Raziani</i> ) <sup>Sor</sup>	<i>Rāzyāne</i> , <i>Rezwash</i>	Fruit [30UR]	<p><b>Oral</b> [26UR] (decoction, grinding/crushing/pulverization, hot infusion)  <b>WGS</b> [9]: menstruation [1]<sup>NW</sup> [3]<sup>SE</sup>, uterine cysts [1]<sup>NW</sup>, female genitourinary infection [3]<sup>NW</sup>, uterine infection [1]<sup>NW</sup>  <b>GID</b> [4]: gastric pain [2]<sup>NW</sup> [2]<sup>SE</sup>  <b>PRC</b> [4]: induction of labor [1]<sup>SE</sup>, female infertility [1]<sup>SE</sup>, postpartum [1]<sup>SE</sup>, breastfeeding [1]<sup>NW</sup>  <b>GNR</b> [3]: weight loss [3]<sup>NW</sup>  <b>CRD</b> [2]: hyperlipidemia [2]<sup>SE</sup>  <b>SKN</b> [2]: warm temperament in the body [2]<sup>SE</sup>  <b>URO</b> [2]: bladder infection [1]<sup>NW</sup>, kidney pain [1]<sup>NW</sup></p> <p><b>Vaginal/Uterine</b> [2UR] (raw)  <b>PRC</b> [2]<sup>SE</sup>: postpartum</p> <p><b>Rectal</b> [1UR] (grinding/crushing/pulverization)  <b>PRC</b> [1]<sup>SE</sup>: female infertility</p> <p><b>Topical</b> [1UR] (topical/bath, raw)  <b>WGS</b> [1]<sup>NW</sup>: female genitourinary infection</p>
<i>Heracleum persicum</i> Desf. ex-Fisch., C.A.Mey.& Avé-Lall. [20UR] <sup>NW</sup>	<i>Golpar</i>	(Solan) <sup>Sor</sup> , ( <i>Soûa</i> ) <sup>Kur</sup>		Aerial parts [8UR]	<p><b>Oral</b> [11UR] (decoction, infusion ((hot))  <b>GID</b> [4]: gastric ulcer, gastric pain [2], flatulence  <b>HEA</b> [3]: anorexia, headache [2: flower or inflorescence]  <b>URO</b> [3]: bladder Infection, kidney pain [1: latex/exudate]  <b>RES</b> [1]: COVID-19</p>
				Leaves [4UR]	<p><b>Oral</b> [4UR] (decoction, hot infusion)  <b>GID</b> [2]: gastric pain [2]  <b>GNR</b> [2]: cancer/oncology, infection</p>
				Subterrestrial parts [5UR]	<p><b>Oral</b> [5UR] (decoction, infusion (hot))  <b>DIA</b> [1]: diabetes  <b>GID</b> [2]: gastric pain  <b>GNR</b> [1]: infection  <b>CRD</b> [1]: hypertension</p>

<i>Psammogeton stocksii</i> (Boiss.) Nasir. [39UR] <sup>SE</sup>	<i>Jafari Kuhi Pakestāni</i>		<i>Ezbohtk</i>	Fruit [39UR]	<p><b>Oral</b> [27UR] (decoction, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, hot infusion, infusion in milk, raw):</p> <p><b>GID</b> [9]: stomachache, gastric ulcer [3], dysentery, diarrhea [3], gastric colic</p> <p><b>PAE</b> [4]: cough, jaundice, cold, tachypnea</p> <p><b>RES</b> [4]: asthma, cough [2], cold</p> <p><b>GNR</b> [3]: infection [2], anaphylaxis</p> <p><b>CRD</b> [2]: hypertension</p> <p><b>HEA</b> [2]: headache</p> <p><b>SKN</b> [2]: herpes</p> <p><b>WGS</b> [1]: menstruation</p> <p><b>Topical</b> [6UR] (grinding/crushing/pulverization, grinding/crushing/pulverization + therm. alteration):</p> <p><b>PAE</b> [3]: perioral dermatitis, premature birth, tachypnea</p> <p><b>RES</b> [3]: cold [2], sinusitis</p> <p><b>Inhalation/Smoke</b> [2UR] (incense/smoke)</p> <p><b>INS</b> [1]: myiasis</p> <p><b>RES</b> [1]: cough</p> <p><b>Ophthalmic</b> [2UR] (grinding/crushing/pulverization)</p> <p><b>EYE</b> [2]: ophthalmic/ocular cleaner, ophthalmic trauma</p> <p><b>Rectal</b> [1UR] (grinding/crushing/pulverization)</p> <p><b>PRC</b>: female infertility</p> <p><b>Topical/Steam bath</b> [1UR] (thermic vaporization/aromatic vapor)</p> <p><b>RES</b> [1]: cold</p>
<i>Smyrniium cordifolium</i> Boiss. [12UR] <sup>NW</sup>	<i>Avandul</i>	<i>(Gonūr)</i> <sup>Sor</sup>		Flower or Inflorescence [4UR]	<p><b>Oral</b> [4UR] (grinding/crushing/pulverization, infusion (hot))</p> <p><b>URO</b> [2]: urinary tract infection</p> <p><b>DIA</b> [1]: reduces blood sugar</p> <p><b>HEA</b> [1]: clamant/sedative</p>
				Fruit [7UR]	<p><b>Oral</b> [7UR] (decoction, hot infusion)</p> <p><b>URO</b> [6]: kidney infection, kidney stones [2], bladder stones, kidney pain</p> <p><b>RES</b> [1]: pneumonia</p>
<b>Apocynaceae</b>					
<i>Apteranthes tuberculata</i> (N.E.Br.) Meve & Liede. [35] <sup>SE</sup>	<i>Šāx-e Gavazni</i>		<i>Mārmurk</i>	Aerial parts [34UR]	<p><b>Oral</b> [30UR] (grinding/crushing/pulverization, decoction, direct thermal alteration (grill, fry, roast, heat, boil, vapor))</p> <p><b>CRD</b> [8]: hyperlipidemia [3], hypertension [5]</p> <p><b>DIA</b> [8]: diabetes</p> <p><b>GID</b> [7]: gastric ulcer [2], gastric pain [5]</p>

					<p><b>MSK</b> [3]: bone and joint pain  <b>URO</b> [2]: kidney pain, kidney stone [1; leaves]  <b>GNR</b> [1]: pain  <b>PRC</b> [1]: postpartum</p> <p><b>Topical</b> [5UR] (poultice and related preparations, plaster, topical/smoke)  <b>VAB</b> [2]: scorpion sting, snake bite  <b>INS</b> [1]: beetle bite  <b>MSK</b> [1]: bone fracture  <b>SKN</b> [1]: allergic dermatitis</p>
<i>Rhazya stricta</i> Decne. [31] <sup>SE</sup>	<i>Gišbarg, Ešvark</i>		<i>Haryshark, Ezhwark, Esherk, Isharg, Hesherk</i>	Aerial parts [2UR]	<p><b>Topical/Steam bath</b> [2UR] (thermic vaporization/aromatic vapor)  <b>MSK</b> [1]: bone and joint pain  <b>PRC</b> [1]: postpartum</p>
				Fruit [3UR]	<p><b>Oral</b> [3UR] (infusion (hot))  <b>CRD</b> [1]: hypertension  <b>GID</b> [1]: dysentery  <b>SKN</b> [1]: warm temperament in the body</p>
				Leaves [24UR]	<p><b>Buccal/Dental/Pharyngal</b> [6UR] (grinding/crushing/pulverization)  <b>DEN</b> [6]: dental infection /caries, dental pain, gingivitis, tongue injury</p> <p><b>Ophthalmic</b> [3UR] (grinding/crushing/pulverization)  <b>EYE</b> [3]: ophthalmic/ocular cleaner, allergic conjunctivitis</p> <p><b>Oral</b> [5UR] (decoction, decoction + dehydration )  <b>GID</b> [4]: diarrhea, food digestion, gastroenteritis, stomachache  <b>GNR</b> [1]: pain</p> <p><b>Topical</b> [3UR] (grinding/crushing/pulverization)  <b>SKN</b> [3]: perioral dermatitis, allergic dermatitis</p> <p><b>Topical/Bath</b> [2UR] (decoction)  <b>MSK</b> [1]: rheumatism  <b>RES</b> [1]: COVID-19</p> <p><b>Topical/Steam bath</b> [5UR] (thermic vaporization/aromatic vapor):  <b>MSK</b> [4]: bone and joint pain, rheumatism, vasodilating of muscle veins  <b>SKN</b> [1]: skin care</p>
				Subterrestrial parts [1UR]	<p><b>Oral</b> [1UR] (decoction + dehydration)  <b>GNR</b> [1]: pain</p>
				Woody parts [1UR]	<p><b>Topical</b> [1UR] (combustion/ashes)  <b>EYE</b> [1]: eye infection</p>

<b>Arecaceae</b>					
<i>Phoenix dactylifera</i> L. [11UR] <sup>NW&amp;SE</sup>	<i>Xorma, Naxl</i>	<i>(Xorma)<sup>Sor</sup></i>	<i>Khorma, Gózhn</i>	Flower or Inflorescence [5UR] ]SE	<b>Oral</b> [4UR] <sup>SE</sup> (grinding/crushing/pulverization, raw) <b>MGS</b> [3]: male infertility <b>MSK</b> [1]: bone and joint pain <b>Topical</b> [1UR] (alternated/mechanical) <b>MSK</b> [1]: disk dislocation and hernia
				Fruit [4UR]	<b>Topical</b> [2UR] (ointment/pomade/oil and fat-based preparations, raw) <b>MSK</b> [1] <sup>SE</sup> : arthritis <b>SKN</b> [1] <sup>NW</sup> : wounds  <b>Oral</b> [1UR] (syrup) <b>WGS</b> [1] <sup>NW</sup> : female genitourinary infection  <b>Vaginal/Uterine</b> [1UR] (grinding/crushing/pulverization) <b>PRC</b> [1] <sup>NW</sup> : female infertility
				Leaves [2UR] <sup>SE</sup>	<b>Ritual/Other</b> [1UR] (other/ritual) <b>PAE</b> [1]: harm caused by evil eye  <b>Topical</b> [1UR] (plaster) <b>MSK</b> [1]: bone fracture
<b>Asteraceae</b>					
<i>Achillea arabica</i> Kotschy [49UR] <sup>NW</sup>	<i>Bumādarān-e Zard</i>	<i>(Bijan, Bujan)<sup>Sor</sup>, (Bojan, Bojani)<sup>Kur&amp;Sor</sup>, (Boyjan)<sup>Kur</sup></i>		Flower or Inflorescence [47UR]	<b>Oral</b> [40UR] (decoction, hot infusion) <b>GID</b> [16]: stomachache [11], gastric and intestinal infection, constipation [2], gastric ulcer, intestinal cancer <b>WGS</b> [6]: menstruation [3], female genitourinary infection [3] <b>HEA</b> [4]: headache <b>DIA</b> [4]: diabetes <b>GNR</b> [3]: allergic reaction/anaphylaxis, infection <b>PRC</b> [3]: postpartum, female infertility <b>RES</b> [2]: cold, asthma <b>PAE</b> [1]: colic <b>SKN</b> [1]: wound  <b>Topical bath/smoke/ steam bath</b> [5UR](decoction, incense) <b>WGS</b> [3]: female genitourinary infection <b>INS</b> [1]: oral and ophthalmic helminthic infestation <b>SKN</b> [1]: pruritus  <b>Rectal</b> [1UR] [grinding/crushing/pulverization] <b>SKN</b> [1]: hemorrhoid

				Aerial parts [2UR]	<b>Topical/steam bath</b> [2UR] [decoction] <b>WGS</b> [2]: female genitourinary infection [2; 1: aerial parts]
<i>Achillea eriophora</i> DC. [70UR] <sup>SE</sup>	<i>Bumādarāne</i> <i>Jonubi</i> , <i>Bumādarān-e</i> <i>Sarzardu</i> , <i>Bumādarān-e</i> <i>širazi</i>		<i>Zāmbul</i> , <i>Berenjásk</i>	Aerial parts [43UR]	<b>Oral</b> [27UR] (decoction, infusion (cold), infusion (hot)) <b>GID</b> [14]: stomachache [3], diarrhea [4], dysentery [2], flatulence, food poisoning, gastric ulcer, vomiting [2] <b>MSK</b> [3]: bone and joint pain [2], rheumatism <b>PAE</b> [3]: hizeh (see text) <b>CRD</b> [2]: hyperlipidemia [2] <b>DIA</b> [2]: diabetes [2] <b>SKN</b> [2]: allergic dermatitis, perioral dermatitis <b>FEV</b> [1]: fever  <b>Rectal</b> [1UR] (rectal suppository) <b>PRC</b> [1]: female infertility  <b>Topical</b> [15UR] (grinding/crushing/pulverization, ointment/pomade/, bath (decoction)) <b>MSK</b> [5]: bone bruised, contusion [2], arthritis, bone fracture <b>SKN</b> [4]: wound <b>PAE</b> [3]: hizeh (see text) <b>GNR</b> [1]: pain <b>HEA</b> [1]: headache <b>SKN</b> [1]: skin wounds
				Flower or Inflorescence [27UR]	<b>Oral</b> [21UR] (cold infusion, hot infusion, decoction) <b>GID</b> [13]: stomachache [5], diarrhea [4], vomiting [3], steatosis <b>CRD</b> [3]: hyperlipidemia <b>DIA</b> [3]: diabetes <b>MSK</b> [1]: bone and joint pain <b>WGS</b> [1]: menstruation  <b>Topical</b> [6UR] (grinding/crushing/pulverization, poultice and related preparations) <b>SKN</b> [4]: coagulating injury, infectious gland on skin [2], skin wounds <b>MSK</b> [1]: contusion <b>RES</b> [1]: cold
<i>Achillea filipendulina</i> Lam. [4UR] <sup>NW</sup>	<i>Bumādarān-e Zagrosi</i> , <i>Bumādarān-e Xazari</i>	( <i>Bezhan</i> ) <sup>Sor</sup>		Flower or Inflorescence [4UR]	<b>Oral</b> [2UR] (infusion (hot)) <b>DIA</b> [1]: diabetes <b>HEA</b> [1]: headache  <b>Topical</b> [2UR] (decoction + dehydration, grinding/crushing/pulverization) <b>SKN</b> [2]: burns, kharkaneh (see text)

<i>Achillea millefolium</i> L. [5UR] <sup>NW</sup>	<i>Bumādarān-e Hezar barg, Bumādarān</i>	( <i>Gola sepi, Gola giah</i> ) <sup>Kur</sup>		Flower or Inflorescence [5UR]	<b>Oral</b> [5UR] (decoction, infusion (hot)) <b>GID</b> [2]: stomachache, gastric and intestine infection <b>GNR</b> [2]: infection <b>RES</b> [1]: sinusitis
<i>Achillea vermicularis</i> Trin. [6UR] <sup>NW</sup>	<i>Bumādarān-e Kuhestani, Čupan-e kebriti</i>	( <i>Boyjan</i> ) <sup>Kur</sup>		Flower or Inflorescence [6UR]	<b>Oral</b> [6UR] (decoction, infusion (hot)) <b>CRD</b> [1]: hypertension <b>DIA</b> [1]: diabetes <b>GID</b> [1]: gastric ulcer <b>EAR</b> [1]: ear infection <b>GNR</b> [1]: infection <b>HEA</b> [1]: headache
<i>Achillea wilhelmsii</i> K.Koch. [35UR] <sup>SE</sup>	<i>Bumādarān</i>		<i>Berenjāsk</i>	Flower or Inflorescence [15UR]	<b>Oral</b> [14UR] (infusion (hot), decoction, infusion (cold)) <b>GID</b> [11]: gastric pain [6]; diarrhea [2], food poisoning [2], vomiting <b>BLD</b> [1]: blood diluting <b>CRD</b> [1]: hypertension <b>DIA</b> [1]: diabetes  <b>Rectal</b> [1UR] (pomade/oil and fat-based preparations) <b>PRC</b> [1]: female infertility
				Aerial Parts [20UR]	<b>Oral</b> [14UR] (decoction, infusion (cold), infusion (hot)) <b>GID</b> [8]: gastric ulcer, diarrhea [2], stomachache [3], vomiting, food poisoning <b>PAE</b> [3]: hizeh (see text) [3] <b>CRD</b> [2]: hyperlipidemia, hypertension <b>TNC</b> [1]: asthenia  <b>Topical</b> [6UR] (topical, topical/bath, topical/steam bath) <b>PAE</b> [4]: hizeh (see text) <b>WGS</b> [1]: uterine prolapse <b>RES</b> [1]: sinusitis
<i>Anthemis odontostephana</i> Boiss. [36UR] <sup>NW</sup>	<i>Bābune Taj Dandāni</i>	( <i>Goli hajiani hajiani, Babū ni</i> ) <sup>Sor</sup>		Flower or Inflorescence [36UR]	<b>Oral</b> [27UR] (decoction, hot infusion (hot)) <b>RES</b> [9]: cough, lung infection [2], cold [2], throat infection [2], asthma [2] <b>GID</b> [6]: gastric pain, gastric ulcer [2], gastric and intestine infection [2], neurogenic gastric pain disorders <b>HEA</b> [4]: nervous reinforcement, head ache, migraine [2] <b>GNR</b> [3]: chilling, infection [2] <b>WGS</b> [2]: uterine infection, menstruation <b>DIA</b> [1]: reduce blood sugar <b>FEV</b> [1]: fever <b>PRC</b> [1]: postpartum infection  <b>Topical</b> [9UR] (topical/steam bath, bath)

					<b>HEA</b> [4]: migraine [1], head ache [3] <b>RES</b> [2]: sinusitis, throat infection <b>GNR</b> [1]: infection <b>SKN</b> [1]: face lightening <b>WGS</b> [1]: uterine infection
<i>Anthemis rhodocentra</i> Iranshahr. [3UR] <sup>SE</sup>	<i>Bābune Kape qermez</i>		<i>Spi gol</i>	Flower or Inflorescence [3UR]	<b>Oral</b> [3UR] (decoction, infusion (hot)) <b>RES</b> [2]: cough, asthma <b>GID</b> [1]: gastric pain
<i>Arctium lappa</i> L. [20UR] <sup>NW</sup>	<i>Bābā Ādām</i>	<i>(Gola hawadara, Gola hawidar, Gola Hawara , Towl, Gala bogan ī)<sup>Sor</sup>, (Nū sag)<sup>Kur</sup></i>		Leave [16UR]	<b>Topical</b> [15UR] (poultice and related preparations, decoction, raw) <b>SKN</b> [7]: lubricant/burn washing, burns, warts, inflammation in injury, skin wounds, infectious injury [2] <b>VAB</b> [4]: snake bite <b>MSK</b> [2]: rheumatism, arthritis <b>HEA</b> [1]: headache <b>WGS</b> [1]: breast cancer
				Subterrestrial parts [4UR]	<b>Oral</b> [2UR] (decoction) <b>GNR</b> [1]: infection <b>MSK</b> [1]: arthritis  <b>Topical</b> [2] (decoction) <b>MSK</b> [2]: arthritis, rheumatism
<i>Artemisia fragrans</i> Willd. [6UR] <sup>NW</sup>	<i>Dermane Moatar</i>	<i>Giah band)<sup>Sor</sup></i>		Aerial parts [6UR]	<b>Oral</b> [5UR] (infusion (hot)) <b>DIA</b> [1]: reduce blood sugar <b>GID</b> [2]: gastric pain <b>HEA</b> [1]: headache <b>URO</b> [1]: kidney stone  <b>Topical</b> [1UR] (poultice and related preparations) <b>HEA</b> [1]: headache
<i>Artemisia sieberi</i> Besser. [6UR] <sup>SE</sup>	<i>Dermane</i>		<i>Dranag deli, Derane deli, Dermane deli</i>	Aerial parts [6UR]	<b>Oral</b> [5UR] (infusion (hot), decoction, grinding/crushing/pulverization) <b>GID</b> [5]: gastric pain [2], diarrhea [2], vomiting  <b>Rectal</b> [1UR] (rectal suppository) <b>WGS</b> [1]: uterine prolapse
<i>Artemisia kermanensis</i> Podlech. [126UR] <sup>SE</sup>	<i>Dermane Kermāni</i>		<i>Dranag, Deranah, Syāh dermaneh, Dermene</i>	Aerial parts [126UR]	<b>Oral</b> [91UR] (decoction, hot infusion, cold infusion, grinding/crushing/pulverization, decoction + dehydration, raw) <b>GID</b> [54]: diarrhea [20], dysentery, nausea, digestive, steatosis, gastric pain [19], food poisoning, gastric ulcer [2], vomiting [7], constipation <b>PAE</b> [9]: colic, hizeh (see text) [8] <b>CRD</b> [7]: hyperlipidemia [6]: hypertension [1] <b>MSK</b> [6]: bone and joint pain [4], rheumatism, arthritis

					<p><b>DIA</b> [4]: diabetes [4]  <b>BLD</b> [3]: blood cancer [2], blood diluting [1]  <b>GNR</b> [3]: cancer/oncology [3]  <b>RES</b> [2]: cold, COVID-19  <b>GOI</b> [1]: goiter  <b>PRC</b> [1]: postpartum [1]  <b>URO</b> [1]: kidney pain</p> <p><b>Topical</b> [28UR] (decoction, bath, grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, poultice and related preparations, topical/bath, topical/smoke, Topical/Steam bath)  <b>SKN</b> [8]: burns, wounds [6], skin care  <b>PAE</b> [5]: fever, hizeh (see text) [4]  <b>GNR</b> [5]: edema, cancer/oncology [3], pain  <b>MSK</b> [3]: arthritis, bone fracture, contusion  <b>PRC</b> [3]: postpartum [2], breastfeeding  <b>RES</b> [3]: cold [1], COVID-19 [1], sinusitis [1]  <b>EYE</b> [1]: allergic conjunctivitis  <b>HEA</b> [1]: headache</p> <p><b>Vaginal/Uterine</b> [5UR] (vaginal ovule)  <b>PRC</b> [3]: female infertility, postpartum [2]  <b>WGS</b> [2]: pain in uterine, uterine prolapse</p> <p><b>Otis</b> [1UR] (decoction)  <b>EAR</b> [1]: ear infection</p> <p><b>Rectal</b> [1UR] (rectal suppository)  <b>PRC</b> [1]: female infertility</p>
<i>Centaurea iberica</i> Trevir. ex Spreng. [3UR] <sup>NW</sup>	<i>Gol-e Gandom-e Čamanzār</i>	<i>Qalama, (Qalama zak)</i> <sup>Kur</sup>		Flower or Inflorescence [3UR]	<p><b>Oral</b> [3UR] (decoction)  <b>CRD</b> [2]: hyperlipidemia  <b>URO</b> [1]: kidney pain</p>
<i>Centaurea solstitialis</i> L. [8UR] <sup>NW</sup>	<i>Gol-e Gandom-e Zard</i>	<i>(Derka zarde, Qalama zarde, Čaghla zarde)</i> <sup>Sor</sup>		Flower or Inflorescence [8UR]	<p><b>Topical</b> [7UR] (combustion/ashes, ointment/pomade/oil and fat-based preparations)  <b>SKN</b> [7]: burns [2], kharkaneh (see text) [4], skin care</p> <p><b>Oral</b> [1UR] (hot infusion (hot))  <b>GID</b> [1]: gall stones</p>

<i>Centaurea virgata</i> Lam. [2UR] <sup>NW</sup>	<i>Gol-e gandom-e Butei, gole gandom-e Tarkei</i>	( <i>Shanderk, Qaran qerink</i> ) <sup>Kor</sup>		Aerial parts [2UR]	<b>Oral</b> [2UR] (decoction) <b>GID</b> [1]: gastric pain <b>RES</b> [1]: asthma
<i>Cichorium intybus</i> L. [57UR] <sup>NW</sup>	<i>Kāsni</i>	(Çax Çaxi, Çax Çaxok) <sup>Kur</sup> , (Çax Çaxi) <sup>Kur&amp;Sor</sup> , (Şoşini) <sup>Sor</sup>		Aerial parts [35UR]	<b>Oral</b> [35UR] (decoction, hot infusion) <b>GNR</b> [8]: cancer/oncology [4], infection [3; 1: all parts] <b>GID</b> [7]: liver reinforcement, diarrhea, steatosis [2], gastric ulcer, gastric pain [2] <b>DIA</b> [6]: reduce blood sugar [6; 1: all parts] <b>CRD</b> [4]: hyperlipidemia [1], cardiovascular problems [2], hypertension <b>WGS</b> [3]: menstruation, female genitourinary infection, female hormone imbalance <b>URO</b> [2]: bladder infection, kidney pain <b>BLD</b> [1]: anemia <b>HEA</b> [1]: clamant/sedative <b>MSK</b> [1]: arthritis <b>RES</b> [1]: throat infection <b>SKN</b> [1]: skin care  <b>Topical</b> [3UR] (poultice and related preparations, topical/bath) <b>WGS</b> [2]: menstruation, female genitourinary infection <b>PAE</b> [1]: colic
				Flower or Inflorescence [13UR]	<b>Oral</b> [14UR] hot infusion (hot) <b>GID</b> [5]: liver purification, gastric ulcer [2], gastric pain, steatosis <b>GNR</b> [4]: cancer/oncology [3; 1: latex/exudate], infection <b>DIA</b> [2]: reduce blood sugar <b>MSK</b> [2]: bone and joint pain [2] <b>URO</b> [1]: urinary incontinence
				Subterrestrial parts [6UR]	<b>Oral</b> [6UR] (decoction) <b>GNR</b> [4]: cancer/oncology [2], infection [1], anti-addiction <b>HEA</b> [1]: nervous reinforcement <b>URO</b> [1]: kidney stone
<i>Cota tinctoria</i> (L.) J.Gay [26UR] <sup>NW</sup>		( <i>Babuni, Golka biybuna, Goli haciani</i> ) <sup>Sor</sup>		Flower or Inflorescence [25UR]	<b>Oral</b> [19UR] (hot infusion(hot)) <b>GID</b> [6]: diarrhea, gastric ulcer [3], gastric pain, intestinal pain <b>HEA</b> [6]: nervous reinforcement [3], headache, clamant/sedative [2] <b>GNR</b> [4]: infection [3], weight loss [1: leaves] <b>RES</b> [2]: asthma, sore throat <b>EYE</b> [1]: weak vision <b>WGS</b> [1]: menstruation  <b>Ophthalmic</b> [3UR] (Direct thermal alteration (grill, fry, roast, heat, boil, vapor), Incense/Smoke)

					EYE [3]: cataract, eye pain, allergic conjunctivitis <b>Topical</b> [3UR] (topical/bath, topical/steam bath) SKN [2]: face lightening [2] WGS [1]: female genitourinary infection
				Leaves [1UR]	<b>Oral</b> [1UR] (decoction) GNR [1]: weight loss
<i>Echinops cf orientalis</i> Trautv. [7UR] <sup>NW</sup>	<i>Shekar Tighal</i>	( <i>Kartaşı</i> ) <sup>Sor</sup> , ( <i>Qıfa Qalami</i> , <i>Qıfa babuxi</i> , <i>Qıfa</i> ) <sup>Kur</sup>		Flower or Inflorescence [7UR]	<b>Oral</b> [6 UR] (raw, decoction, grinding/crushing/pulverization) <b>GID</b> [3]: steatosis, gastric pain, gastric and intestine infection <b>RES</b> [2]: asthma [2] <b>DIA</b> [1]: reduce blood sugar  <b>Mechanical</b> [1UR] (alternated/mechanical) <b>VAB</b> [1]: snake bite
<i>Helichrysum oligocephalum</i> S.Moore.[10UR] <sup>NW</sup>	<i>Gol-e Bimarg-e Kam Kape</i>	( <i>Baruna</i> , <i>Gol miz</i> , <i>Gol hang</i> , <i>Gol ron</i> , <i>Gol Miz</i> ) <sup>Sor</sup>		Flower or Inflorescence [9UR]	<b>Oral</b> [7UR] (infusion (hot)) <b>HEA</b> [3]: depression, headache [2] <b>GID</b> [1]: intestinal parasites <b>GNR</b> [1]: infection <b>PAE</b> [1]: jaundice <b>SKN</b> [1]: wound  <b>Topical</b> [3UR] [steam bath] <b>HEA</b> [3]: headache, migraine [2; 1: aerial parts]
<i>Leucanthemum vulgare</i> Lam. [31UR] <sup>NW</sup>	<i>Not know</i>	( <i>Babuni</i> , <i>Gola Ispi</i> ) <sup>Kur&amp;Sor</sup> , ( <i>Papatıya</i> ) <sup>Kur</sup>		Flower or Inflorescence [29UR]	<b>Oral</b> [27UR] (decoction, hot infusion, raw) <b>GID</b> [14]: gastric pain [2], gastroenteritis, gastric ulcer [9], hemorrhoid, neurogenic gastric disorders <b>GNR</b> [6]: infection [flower, leaves: raw] <b>HEA</b> [3]: nervous reinforcement [2], headache <b>RES</b> [2]: cold, pharyngitis <b>SKN</b> [2]: hair loss, acne <b>CRD</b> [2]: cardiovascular disease <b>PRC</b> [1]: hemostasis after abortion <b>URO</b> [1]: kidney stone <b>WGS</b> [1]: uterine infection  <b>Topical/bath</b> [2UR] (infusion (hot)) <b>SKN</b> [2]: Scalp and hair care, skin care

<i>Onopordum carduchorum</i> Bornm.& Beauverd [10UR] <sup>NW</sup>	<i>Xarpanbe-ye Šahui</i>	( <i>Karkul</i> ) <sup>Kur&amp;Sor</sup>		Flower or Inflorescence [10UR]	<b>Oral</b> [10UR] (infusion (hot)) <b>DIA</b> [4]: diabetes [4] <b>GID</b> [2]: gastric ulcer, gastric pain <b>RES</b> [2]: cough, pneumonia <b>URO</b> [1]: kidney pain <b>GNR</b> [1]: cancer/oncology [aerial parts]
<i>Pulicaria gnaphalodes</i> (Vent.) Boiss. [35UR] <sup>SE</sup>	<i>Kakkoshe Biābāni</i>		<i>Bumádarán</i>	Aerial parts [17UR]	<b>Oral</b> [8UR] (decoction, infusion (hot)) <b>CRD</b> [3]: cardiovascular problems, hyperlipidemia <b>GID</b> [3]: diarrhea, stomachache <b>GNR</b> [1]: food allergies <b>PAE</b> [1]: hizeh (see text)  <b>Topical/Bath</b> [7UR] (decoction) <b>GID</b> [3]: diarrhea, vomiting <b>PAE</b> [3]: hizeh (see text) <b>GNR</b> [1]: food allergies  <b>Aroma</b> [1UR] (Raw) <b>GNR</b> [1]: food allergies  <b>Nasal</b> [1UR] (decoction in oil) <b>PAE</b> [1]: nasal congestion
				Flower or Inflorescence [8UR]	<b>Oral</b> [7UR] (decoction, infusion (hot)) <b>GID</b> [3]: diarrhea, stomachache, food poisoning <b>PAE</b> [3]: colic, hizeh (see text) <b>CRD</b> [1]: cardiovascular problems  <b>Topical/Bath</b> [1UR] (decoction) <b>PAE</b> [1]: hizeh (see text)
				Fruit [1UR]	<b>Oral</b> [1UR] (direct thermal alteration) <b>GID</b> [1]: intestinal parasites
				Leaves [9UR]	<b>Oral</b> [7UR] (decoction, infusion (hot)) <b>GID</b> [5]: diarrhea, stomachache, gastric ulcer, emesis <b>PAE</b> [1]: hizeh (see text) <b>RES</b> [1]: cough  <b>Rectal</b> [1UR] (rectal suppository)

					<b>PRC</b> [1]: female infertility <b>Topical/Bath</b> [1UR] (decoction) <b>PAE</b> [1]: hizeh (see text)
<i>Rhaponticum repens</i> (L.) Hidalgo. [14UR] <sup>NW&amp;SE</sup>	<i>Talx-e Gijej</i>	<i>(Tališka, Tališke Malamišk, Tališkeh)</i> <sup>Sor</sup> , <i>(Talamišk)</i> <sup>Kur</sup>	<i>Kór</i>	Aerial parts [6UR]	<b>Oral</b> [5UR] <sup>NW</sup> (decoction, infusion (hot), raw) <b>DIA</b> [3]: reduces blood sugar <b>GNR</b> [1]: cancer <b>VEN</b> [1]: snake venom allergy  <b>Topical</b> [1UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [1] <sup>SE</sup> : rheumatism
				All parts [1UR]	<b>Topical/Bath</b> [1UR] (decoction) <b>DIA</b> [1] <sup>NW</sup> : reduces blood sugar
				Flower or Inflorescence [2UR]	<b>Oral</b> [2UR] <sup>NW</sup> (decoction) <b>DIA</b> [1]: reduces blood sugar <b>GID</b> [1]: stomachache
				Leaves [5UR]	<b>Oral</b> [4UR] <sup>NW</sup> (infusion (hot), raw) <b>DIA</b> [3]: reduces blood sugar <b>MGS</b> [1]: prostatitis  <b>Other external</b> [1UR] (raw) <b>DIA</b> [1] <sup>SE</sup> : reduces blood sugar
<i>Silybum marianum</i> (L.) Gaertn. [16UR] <sup>NW</sup>	<i>Xar Maryam</i>	<i>Xare maryam</i>		Aerial parts [3UR]	<b>Oral</b> [3UR] (infusion (hot)) <b>GID</b> [3]: steatosis
				Flower or Inflorescence [8UR]	<b>Oral</b> [8UR] (infusion (hot)) <b>GID</b> [2]: intestinal cancer, intestinal pain <b>CRD</b> [1]: cardiovascular problems <b>DIA</b> [1]: reduces blood sugar <b>MGS</b> [1]: prostatitis <b>MSK</b> [1]: bone and joint pain <b>SKN</b> [2]: skin cancer, skin care
				Leaves [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>SKN</b> [1]: skin cancer
				Seeds [4UR]	<b>Oral</b> [4UR] (infusion (hot)) <b>GID</b> [2]: intestinal cancer, steatosis <b>MGS</b> [1]: prostatitis <b>DIA</b> [1]: reduces blood sugar
<i>Tanacetum pinnatum</i> Boiss. [5UR] <sup>NW</sup>	<i>Minā-ye Damāvandi, Minā-ye Šanei</i>	<i>(Bezhan)</i> <sup>Sor</sup>		Flower and inflorescence [5UR]	<b>Oral</b> [4UR] (infusion (hot)) <b>GID</b> [2]: diarrhea, stomachache <b>WGS</b> [2]: female genitourinary infection, uterine cysts

					<b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: hemorrhoid
<i>Tanacetum parthenium</i> (L.) Sch.Bip. [13UR] <sup>NW</sup>	<i>Bābune-ye Gāvi</i>	<i>(Bijan, Goli Barûne)</i> <sup>Sor</sup>		Aerial parts [5UR]	<b>Oral</b> [3UR] (infusion (hot)) <b>CRD</b> [1]: hyperlipidemia <b>GID</b> [1]: intestinal parasites <b>HEA</b> [1]: clamant/sedative  <b>Topical</b> [2UR] (grinding/crushing/pulverization) <b>SKN</b> [2]: skin burns, scars
				Flower or Inflorescence [8UR]	<b>Oral</b> [7UR] (infusion (hot)) <b>DIA</b> [2]: reduces blood sugar <b>GID</b> [2]: hemorrhoids, intestinal parasites <b>WGS</b> [3]: female genitourinary infection  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: hemorrhoids
<b>Berberidaceae</b>					
<i>Berberis integerrima</i> Bunge. [40UR] <sup>SE</sup>	<i>Zerešk-e Zарафšāni</i>		<i>Zārch</i>	Fruit [5UR]	<b>Oral</b> [5UR] (infusion (cold), raw) <b>CRD</b> [2]: hyperlipidemia <b>GID</b> [2]: steatosis, jaundice <b>DIA</b> [1]: diabetes
				subterrestrial parts [35UR]	<b>Oral</b> [30UR] (decoction, grinding/crushing/pulverization, hot infusion, syrup) <b>MSK</b> [23]: bone and joint pain [3], bone fracture [18], bone bruised, rheumatism <b>RES</b> [3]: cold, COVID-19 [2] <b>PRC</b> [2]: postpartum infection, postpartum uterine cramps <b>WGS</b> [1]: uterine cysts <b>PAE</b> [1]: fever  <b>Topical</b> [5UR] (poultice and related preparations, decoction, topical/bath) <b>MSK</b> [3]: bone fracture [2], bone and joint pain <b>SKN</b> [1]: wound <b>GNR</b> [1]: pain
<b>Boraginaceae</b>					
<i>Anchusa italica</i> Retz.[29] <sup>NW</sup>	<i>Gav Zabān</i>	<i>(Gozerban, Gol gaw zaban)</i> <sup>Sor</sup>		Flower or Inflorescence [24UR]	<b>Oral</b> [23UR] (hot infusion (hot)) <b>RES</b> [12]: cold, cough [7], pneumonia [2], COVID-19, throat infection <b>GID</b> [6]: gastric pain [3], constipation [1], gastric ulcer [2] <b>HEA</b> [4]: nervous reinforcement, clamant/sedative, headache [2] <b>GNR</b> [1]: infection  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>VAB</b> [1]: snake bite

				Leaves [3UR]	<b>Oral</b> [4UR] (infusion (hot), decoction) <b>RES</b> [3]: cough, pneumonia, throat infection <b>GID</b> [1]: constipation [1; subterrestrial parts]
<b>Brassicaceae</b>					
<i>Alyssum szovitsianum</i> Fisch.& C.A.Mey.[33UR] <sup>SE</sup>	<i>Qodume Ārārāti</i>		<i>Tutari</i>	Seeds [33UR]	<b>Oral</b> [30UR] (decoction, raw, infusion (milk), hot infusion) <b>RES</b> [15]: asthma, cough [7], cold [7] <b>GID</b> [9]: gastric pain [4], constipation [3], gastric ulcer [2] <b>MSK</b> [3]: chest pain [3] <b>PRC</b> [1]: induction of labor <b>SKN</b> [1]: warm temperament in the body <b>GNR</b> [1]: infection  <b>Topical</b> [2UR] (poultice and related preparations, plaster) <b>MSK</b> : chest Pain, bone fracture Ophthalmic (raw) <b>EYE</b> [1]: ophthalmic/ocular cleaner
<i>Clypeola aspera</i> (Weber) Turrill. [20UR] <sup>SE</sup>	<i>Xardel sepany</i> <i>Xaraki</i>		<i>Tutari</i>	Fruits [20UR]	<b>Oral</b> [20UR] (decoction, cold infusion, raw), direct thermal alteration (grill, fry, roast, heat, boil, vapor) <b>RES</b> [15]: cold [7], cough [8] <b>GID</b> [3]: diarrhea, gastric ulcer, gastric pain <b>SKN</b> [1]: warm temperament in the body <b>URO</b> [1]: urinary tract infection
<i>Descurainia sophia</i> (L.) Webb ex Prantl [33UR] <sup>NW&amp;SE</sup>	<i>Xakšir-e Irāni</i>	( <i>Xakšir</i> ) <sup>Kur&amp;Sor</sup>	<i>Kháshir,</i> <i>Rasuli</i>	Seeds [33UR]	<b>Oral</b> [23UR] (infusion (cold), infusion (hot), decoction, syrup) <b>GID</b> [22]: constipation [5] <sup>NW</sup> [4] <sup>SE</sup> , food poisoning [1] <sup>SE</sup> , gastric ulcer [3] <sup>SE</sup> , nausea [1] <sup>SE</sup> , gastric pain [6] <sup>SE</sup> , intestinal pain [1] <sup>SE</sup> , gastric and intestine infection [1] <sup>SE</sup> <b>SKN</b> [3]: pruritus [1] <sup>NW</sup> , kharkaneh (see text) [1] <sup>NW</sup> , warm temperament in the body [1] <sup>SE</sup> <b>CRD</b> [2]: hyperlipidemia [2] <sup>SE</sup> <b>BLD</b> [1]: blood regulate /general/ [1] <sup>NW</sup> <b>FEV</b> [1]: fever [1] <sup>NW</sup> <b>GNR</b> [1]: infection [1] <sup>NW</sup> <b>HEA</b> [1]: dizzy [1] <sup>NW</sup> <b>PAE</b> [1]: colic [1] <sup>SE</sup> <b>RES</b> [1]: asthma [1] <sup>NW</sup>
<i>Fortuynia garcinii</i> (Burm.f.) Shuttlew. [13UR] <sup>SE</sup>	<i>Šab Buye</i> <i>Biābāni</i> <i>Garmsiri</i>		<i>Kalmak,</i> <i>Kalambak</i>	Fruit [10UR]	<b>Topical</b> [8UR] (poultice and related preparations, decoction, grinding/crushing/pulverization) <b>MSK</b> [2]: bone and joint pain, contusion <b>SKN</b> [6]: skin cancer, wound [2], fungal infection [3: leaves]  <b>Oral</b> [5UR] (grinding/crushing/pulverization, decoction) <b>URO</b> [3]: kidney pain [2], kidney stone <b>PAE</b> [2]: flatulence, tightening baby bone

<i>Lepidium sativum</i> L. [14UR] <sup>SE</sup>	<i>Šahi, Tartizak</i>		<i>Espantán sorkh</i>	Seeds [14UR]	<p><b>Topical</b> [8UR] (decoction, decoction + dehydration, grinding/crushing/pulverization, steam bath)  <b>HEA</b> [2]: headache [2]  <b>MSK</b> [3]: contusion, rheumatism [2]  <b>SKN</b> [3]: hemorrhoid, wound [2]</p> <p><b>Oral</b> [6UR] (decoction, grinding/crushing/pulverization, infusion (hot))  <b>RES</b> [4]: cough [4]  <b>PRC</b> [2]: postpartum</p> <p><b>Rectal</b> [1UR] (grinding/crushing/pulverization)  <b>SKN</b> [1]: hemorrhoid</p>
<i>Nasturtium nasturtium-aquaticum</i> (L.) H.Karst. [48UR] <sup>NW</sup>	<i>Tartizak-e Ābi, Bulāq Oti, Ābtare, Alafe Ćešme</i>	(Kūzali) <sup>Sor</sup>		Aerial parts [40UR]	<p><b>Oral</b> [28UR] (infusion (hot), raw, decoction)  <b>GOI</b> [7]: goiter [7]  <b>URO</b> [6]: kidney pain [2], renal detoxification, kidney infection [2], bladder infection  <b>GID</b> [4]: gastric pain [4]  <b>GNR</b> [4]: cancer/oncology, air disinfectant, infection [2]  <b>WGS</b> [3]: female genitourinary infection [3]  <b>RES</b> [2]: cold, pneumonia  <b>CRD</b> [1]: cardiovascular disease  <b>PRC</b> [1]: female infertility</p> <p><b>Topical</b> [12UR] (poultice and related preparations, raw, grinding/crushing/pulverization, topical/steam bath, bath)  <b>WGS</b> [8]: female genitourinary infection [7], abnormal menstruation  <b>GOI</b> [2]: goiter [2]  <b>PRC</b> [1]: postpartum abdominal pain  <b>GNR</b> [1]: infection</p>
				Subterrestrial parts [2UR]	<p><b>Topical</b> [2UR] (topical/steam bath (decoction))  <b>WGS</b> [2]: uterine infection, menstruation</p>
				All parts [6UR]	<p><b>Oral</b> [2UR] (grinding/crushing/pulverization, decoction)  <b>GOI</b> [1]: goiter [1], hypothyroidism</p> <p><b>Topical</b> [4UR] (plaster, poultice and related preparations, grinding/crushing/pulverization)  <b>GOI</b> [2]: goiter [2]  <b>PAE</b> [1]: flatulence  <b>GID</b> [1]: flatulence</p>
<b>Capparaceae</b>					
<i>Capparis spinosa</i> L.[11UR] <sup>SE</sup>	<i>Kavar, Alafe Mār, Kabar</i>		<i>Galabók</i>	Fruit [11UR]	<p><b>Topical</b> [8UR] (grinding/crushing/pulverization, poultice and related preparations, raw, topical/steam bath)  <b>MSK</b> [5]: bone and joint pain, arthritis, rheumatism [2], opening veins of muscles</p>

					<b>PRC</b> [2]: postpartum [1] <b>HEA</b> [1]: headache <b>SKN</b> [1]: skin care  <b>Oral</b> [3UR] (decoction, grinding/crushing/pulverization) <b>WGS</b> [2]: pelvic pain, vaginal gas <b>PRC</b> [1]: postpartum
<b>Caryophyllaceae</b>					
<i>Silene austroiranica</i> Rech.f., Aellen& Esfand. [20UR] <sup>SE</sup>	<i>Silene Jonubi</i>		<i>Kah Pimalók, Kapi Melók</i>	Aerial parts [20UR]	<b>Oral</b> [20UR] (decoction, infusion (hot), syrup) <b>GID</b> [12]: appendicitis, constipation [3], flatulence, stomachache [4], gastric ulcer, intestinal pain [2] <b>APT</b> [2]: neutralizing magic <b>GNR</b> [2]: pain <b>HEA</b> [2]: clamant/sedative, nervous reinforcement <b>MSK</b> [1]: bone and joint pain <b>URO</b> [1]: kidney pain
<b>Chenopodiaceae/Amaranthaceae</b>					
<i>Haloxylon salicornicum</i> (Moq.) Bunge ex Boiss. [15UR] <sup>SE</sup>	<i>Terāt</i>		<i>Terāt</i>	Aerial parts [15UR]	<b>Topical</b> [12UR] (decoction + dehydration, smoke, steam bath) <b>SKN</b> [9]: pruritus [4] fungal infection [2], allergic dermatitis [3] <b>INS</b> [2]: bee sting allergy, bee sting <b>MSK</b> [1]: rheumatism  <b>Oral</b> [3UR] (decoction) <b>INS</b> [2]: bee sting allergy, allergic symptoms caused by samah fly (parasite fly) <b>SKN</b> [1]: pruritus
<b>Cucurbitaceae</b>					
<i>Citrullus lanatus</i> (Thunb.) Matsum.& Nakai [1UR] <sup>NW</sup>	<i>Hendevāne</i>	<i>Hindivane</i>		Fruit [1UR]	<b>Oral</b> (decoction + dehydration) <b>URO</b> [1]: kidney stone
<i>Citrullus colocynthis</i> (L.) Schrad. [19UR] <sup>SE</sup>	<i>Hanzal, Hendevāne-ye Ābujahl</i>		<i>Kalkoshtag, Gónj</i>	Fruit [11UR]	<b>Topical</b> [11UR] (decoction + dehydration, grinding/crushing/pulverization, topical/bath, topical/steam bath) <b>MSK</b> [4]: bone and joint pain, contusion, rheumatism [2; 1: leaves] <b>SKN</b> [3]: hemorrhoid, skin care, wound <b>DIA</b> [3]: diabetes [3] <b>GNR</b> [1]: malt fever [1: leaves]  <b>Oral</b> [2UR] (decoction, raw) <b>DIA</b> [1]: diabetes <b>URO</b> [1]: kidney pain

				Seeds [6UR]	<b>Oral</b> [5] [raw] <b>GID</b> [3]: food poisoning, gastric pain, parasites <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: diabetes  <b>Buccal/Dental/Pharyngal</b> [1UR] <b>DNT</b> [1]: dental pain
<b>Fabaceae</b>					
<i>Alhagi pseudalhagi</i> (M.Bieb.) Desv. ex Wangerin. [24UR] <sup>SE</sup>	<i>Xārshotor-e</i> <i>Xazari</i> , <i>Xarshotor-e</i> <i>qafqāzi</i>		<i>Shenz</i>	Subterrestrial parts [11UR]	<b>Oral</b> [10UR] (decoction, grinding/crushing/pulverization, raw) <b>GID</b> [5]: digestive, gastric ulcer, gastric and intestine infection, stomachache [2] <b>URO</b> [4]: kidney pain [3], urinary tract infection <b>SKN</b> [1]: allergic dermatitis  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>DNT</b> [1]: teeth infection
				Fruits [3UR]	<b>Oral</b> [4UR] (decoction, infusion (hot)) <b>PAE</b> [3]: jaundice, paediatric kidney disease, dysuria <b>URO</b> [1]: kidney stone <b>SKN</b> [1]: warm temperament in the body [1; latex]
				Flower or Inflorescence [7UR]	<b>Oral</b> [8UR] (decoction, syrup) <b>GID</b> [2]: Jaundice [2; 1, seed,] <b>PAE</b> [5]: problem in baby urine, baby kidney, rash on baby skin due to wormy, flatulence, jaundice <b>URO</b> [1]: kidney stone  <b>Topical/steam bath</b> [2UR] Eye [2]: eye pain [1: flower, 1: aerial parts]
<i>Astragalus fasciculifolius</i> Boiss. [68UR] <sup>SE</sup>	-		<i>Gonjet</i>	Latex/Exudate [55UR]	<b>Oral</b> [38UR] (infusion (hot), grinding/crushing/pulverization, decoction) <b>RES</b> [25]: cold [3], lung infection [2], cough [19; 1: aerial parts], asthma <b>GID</b> [3]: gastric ulcer [2; 1: subterrestrial parts], vomiting [1: leaves] <b>MSK</b> [3]: bone fracture [2], contusion <b>SKN</b> [3]: skin wounds [3] <b>DIA</b> [2]: diabetes [2; 1: leaves] <b>HEA</b> [1]: headache <b>PRC</b> [1]: post-abortion [1: bark]  <b>Topical</b> [30UR] (grinding/crushing/pulverization, poultice and related preparations, plaster, gel, grinding/crushing/pulverization) <b>MSK</b> [12]: bone fracture [7; 1: aerial parts; 1: fibers], arthritis, contusion [2], bone and joint pain [2] <b>DNT</b> [6]: tooth whitening [6; 4: subterrestrial parts; 1: woody parts]

					<b>EAR</b> [2]: ear infection [2] <b>HEA</b> [2]: headache, migraine <b>PRC</b> [2]: post-abortion [1; bark], postpartum infection <b>RES</b> [2]: cough [2; 1: subterrestrial parts] <b>SKN</b> [2]: skin wounds, hair gel <b>WGS</b> [1]: menstruation <b>PAE</b> [1]: umbilical cord stump healing
<i>Astragalus fischeri</i> Buhse. [20UR] <sup>SE</sup>	-		<i>Kóruchko,</i> <i>Kóruchók,</i> <i>Chel gojók</i>	Subterrestrial parts[17UR]	<b>Topical</b> [19UR] (decoction + dehydration, grinding/crushing/pulverization, plaster, poultice and related preparations, buccal/dental/pharyngeal) <b>MSK</b> [17]: waist disk [2], joint dislocation and effusion, arthritis [3], bone fracture [8; 1: latex/exudate], bone and joint pain [3] <b>DNT</b> [2]: tooth whitening, teeth infection [1: latex/exudate]  <b>Oral</b> [1UR] (raw) <b>RES</b> [1]: cough
<i>Astragalus</i> sp1 [7UR] <sup>NW</sup>	<i>Gavan</i>	( <i>Goini, Gavan, Goni</i> ) <sup>Sor</sup> , ( <i>Goni</i> ) <sup>Kur</sup>		Latex/Exudate [2UR]	<b>Oral</b> [2UR] (decoction) <b>GID</b> [1]: gastric ulcer <b>URO</b> [1]: Kidney pain  <b>Topical</b> [2UR] (grinding/crushing/pulverization) <b>SKN</b> [2]: urticarial, hemorrhoid (1: subterrestrial parts)
<i>Astragalus</i> sp2 [3UR] <sup>NW</sup>	<i>Gavan</i>	( <i>Guni</i> ) <sup>Kur</sup>		Aerial parts [2UR]	<b>Oral</b> [2UR] (decoction) <b>GNR</b> [1]: infection) <b>HEA</b> [1]: nervous reinforcement  <b>Topical</b> [1UR] (poultice and related preparations) <b>MSK</b> : bone and joint pain (subterrestrial parts)
<i>Glycyrrhiza glabra</i> L. [62UR] <sup>NW&amp;SE</sup>	<i>Širin Bayān</i> <i>Kork Qodei</i>	( <i>Balak</i> ) <sup>Sor</sup> , ( <i>Mikûk</i> ) <sup>Kur&amp;Sor</sup>	<i>Mado</i>	Subterrestrial parts [53UR]	<b>Oral</b> [43UR] (hot infusion, decoction, grinding/crushing/pulverization, decoction + dehydration, grinding/crushing/pulverization + formulation, infusion (hot)) <b>GID</b> [26]: gastric and intestine infection [2] <sup>NW</sup> , gastric ulcer [8] <sup>NW</sup> [9] <sup>SE</sup> , neurogenic gastric disorders [1] <sup>NW</sup> , acid reflux [1] <sup>NW</sup> , gastric pain [2] <sup>NW</sup> [2] <sup>SE</sup> , flatulence [1] <sup>NW</sup> <b>WGS</b> [9]: menstruation [4] <sup>NW</sup> , ovarian cyst [1] <sup>NW</sup> , uterine cysts [1] <sup>NW</sup> , female genitourinary infection [2] <sup>NW</sup> , uterine laziness [1] <sup>NW</sup> <b>RES</b> [3]: lung infection [1] <sup>NW</sup> , cough [1] <sup>NW</sup> , throat[1] <sup>NW</sup> <b>PRC</b> [2]: induced abortion [1] <sup>NW</sup> , postpartum [1] <sup>NW</sup> <b>HEA</b> [1]: nervous reinforcement [1] <sup>NW</sup> <b>MSK</b> [1]: rheumatism [1] <sup>NW</sup> <b>SKN</b> [1]: allergic dermatitis [1] <sup>NW</sup>  <b>Topical</b> [10UR] (decoction + dehydration, poultice and related preparations, topical/bath, topical/steam bath)

					<p><b>MSK</b> [7]: bone fracture [1]<sup>SE</sup>, joint dislocation and effusion[1]<sup>SE</sup>, arthritis [1]<sup>SE</sup>, rheumatism [1]<sup>NW</sup>, bone and joint pain [1]<sup>NW</sup>, waist disk [2]<sup>NW</sup></p> <p><b>WGS</b> [2]: menstruation [1]<sup>NW</sup>, female genitourinary infection [1]<sup>NW</sup></p> <p><b>PRC</b> [1]: postpartum [1]<sup>SE</sup></p>
				Aerial parts [8UR]	<p><b>Topical</b> [7UR] (bath, steam bath, decoction, aroma vapor)</p> <p><b>MSK</b> [6]: rheumatism [1]<sup>NW</sup> [3]<sup>SE</sup>, arthritis [1: leaves]<sup>NW</sup>, bone and joint pain [1: leaves]<sup>NW</sup>, joint dislocation and effusion [1: leaves]<sup>NW</sup></p> <p><b>PRC</b> [1]: postpartum [1]<sup>SE</sup></p> <p><b>Oral</b> [1UR] (decoction)</p> <p><b>PRC</b> [1]: induced abortion [1]<sup>NW</sup></p> <p><b>Other external</b> [1UR]</p> <p><b>SKN</b> [1]: skin care [1: leaves]<sup>NW</sup></p>
<i>Medicago sativa</i> L. [14UR] <sup>NW&amp;SE</sup>	<i>Yonje</i>	( <i>Unja</i> ) <sup>Kur</sup> , ( <i>Yonji</i> ) <sup>Kur&amp;Sor</sup>	<i>Yonjeh</i>	Aerial parts [14UR]	<p><b>Topical</b> [8UR] (poultice, grinding/crushing/pulverization)</p> <p><b>SKN</b> [7]<sup>NW</sup>: skin wounds [2], coagulant [5]</p> <p><b>WGS</b> [1]<sup>NW</sup>: menorrhagia</p> <p><b>Oral</b> [6UR] (infusion (hot), grinding/crushing/pulverization)</p> <p><b>BLD</b> [2]<sup>NW</sup>: anemia, hematoma cathartic</p> <p><b>GNR</b> [2]<sup>NW</sup>: anabolic</p> <p><b>CRD</b> [1]<sup>SE</sup>: hyperlipidemia</p> <p><b>DIA</b> [1]<sup>SE</sup>: diabetes</p>
<i>Trifolium campestre</i> Schreb. [9UR] <sup>NW</sup>	<i>Šabdar-e Zard</i> , <i>Šabdar-e Māzrāe Ruy</i>	(Sipare) <sup>Sor</sup> (Šabdar) <sup>Kur</sup>		Aerial parts [5UR]	<p><b>Topical</b> [3UR] (grinding/crushing/pulverization, poultice and related preparations)</p> <p><b>PAE</b> [2]: colic</p> <p><b>SKN</b> [1]: burns</p>
				Flower or Inflorescence [2UR]	<p><b>Topical/Bath</b> [2UR] (decoction)</p> <p><b>PRC</b> [1]: female infertility</p> <p><b>WGS</b> [1]: female genitourinary infection</p>
				Leaves [2UR]	<p><b>Oral</b> [1UR] (grinding/crushing/pulverization)</p> <p><b>PAE</b> [1UR]: flatulence</p> <p><b>Topical</b> [1UR] (grinding/crushing/pulverization)</p> <p><b>SKN</b> [1]: burns</p>
<i>Trifolium purpureum</i> Loisel. [1UR]	<i>Šabdar-e Arqavāni</i>	(Separeh) <sup>Sor</sup>		Leaves [1UR]	<p><b>Oral</b> [1UR] (infusion (hot))</p> <p><b>GID</b> [1]: gastric pain</p>
<b>Fagaceae</b>					
<i>Quercus infectoria</i> G.Olivier. [48UR] <sup>NW</sup>	<i>Darmazu</i> , <i>Mazuj</i> , <i>Balut</i>	( <i>Baru</i> , <i>Mazu</i> , <i>Gezgel</i> , <i>Ciçke</i> or <i>gezgel</i> ,		Gall [21UR]	<p><b>Topical</b> [15UR] (grinding/crushing/pulverization)</p> <p><b>SKN</b> [12]: burns [2], fungal infection, hemorrhoids, houshkeh biro (see text) (kharkaneh (see text)), perioral dermatitis, scalp and hair care, warts, wounds [4]</p>

	<i>Halabi, Balut Irani</i>	<i>Gazû, Gazangin, gaz alafi</i> <sup>Sor</sup>			<p><b>DEN</b> [1]: dental pain  <b>PAE</b> [1]: baby grinding/crushing/pulverization  <b>PRC</b> [1]: female infertility</p> <p><b>Oral</b> [2UR] (direct thermal alteration, infusion (hot))  <b>DIA</b> [1]: reduces blood sugar  <b>GID</b> [1]: constipation</p> <p><b>Topical/Bath</b> [2UR] (decoction)  <b>PRC</b> [1]: female infertility  <b>WGS</b> [1]: female genitourinary infection</p> <p><b>Topical/Smoke</b> [1UR] (grinding/crushing/pulverization)  <b>GNR</b> [1]: air disinfectant</p> <p><b>Vaginal/Uterine</b> [1UR] (grinding/crushing/pulverization)  <b>PRC</b> [1]: female infertility</p>
				Latex/Exudate [1UR]	<p><b>Oral</b> [1UR] (grinding/crushing/pulverization)  <b>GID</b> [1]: liver reinforcement</p>
				Leaves [1UR]	<p><b>Oral</b> [1UR] (grinding/crushing/pulverization)  <b>SKN</b> [1]: body warmth</p>
				Fruit [25UR]	<p><b>Oral</b> [22 UR] (direct thermal alteration, grinding/crushing/pulverization)  <b>GID</b> [20]: acid reflux [2], constipation [2], stomachache [3], gastric ulcer [12], intestinal pain  <b>MGS</b> [1]: prostatitis  <b>RES</b> [1]: cold</p> <p><b>Topical/Bath</b> [3UR] (decoction)  <b>WGS</b> [3]: female genitourinary infection [2], vaginal fungus infection</p>
<b>Fumariaceae</b>					
<i>Fumaria asepala</i> Boiss. [37UR] <sup>NW&amp;SE</sup>	<i>Šahrtare-ye Bi Kāsbarg</i>	( <i>Šahta</i> ) <sup>Kur</sup> , ( <i>Šahrtara</i> ) <sup>Kur&amp;Sor</sup>	<i>Sháh ter</i>	Aerial parts [29UR]	<p><b>Topical</b> [19UR] (poultice and related preparations, grinding/crushing/pulverization, topical/bath)  <b>SKN</b> [11]: pruritus [2]<sup>NW</sup>, wound [1]<sup>NW</sup> [1]<sup>SE</sup>, fungal infection [1]<sup>NW</sup>, kharkaneh (see text) [2; 1: all parts]<sup>NW</sup>, skin care [2]<sup>NW</sup>, Feet Corn [1]<sup>NW</sup>, allergic dermatitis [1]<sup>NW</sup>  <b>HEA</b> [4]: headache [all parts]<sup>NW</sup>  <b>HEA</b> [2]: headache [2]<sup>NW</sup>  <b>RES</b> [1]: sinusitis [1]<sup>NW</sup>  <b>WGS</b> [1]: female genitourinary infection [1]<sup>NW</sup></p> <p><b>Oral</b> [18UR] (infusion (hot))  <b>GID</b> [7]: gastric pain [2]<sup>NW</sup>, diarrhea [1]<sup>NW</sup>, steatosis [3]<sup>NW</sup>, liver reinforcement [1]<sup>NW</sup></p>

					<b>SKN</b> [7]: pruritus [3] <sup>NW</sup> , burns [1] <sup>NW</sup> , skin care [1] <sup>NW</sup> , allergic dermatitis [2; 1: seeds] <sup>NW</sup> <b>TNC</b> [1]: nutrient absorption [1] <sup>NW</sup> <b>DIA</b> [1]: diabetes [1: leaves] <sup>SE</sup> <b>PRC</b> [1]: female infertility [1: seeds] <sup>NW</sup> <b>GNR</b> [1]: infection [1] <sup>NW</sup>
<b>Iridaceae</b>					
<i>Crocus sativus</i> L. [10UR] <sup>NW&amp;SE</sup>	<i>Zaferan</i>	<i>Zafiran</i>	<i>Zaferan</i>	Flower or Inflorescence [10UR]	<b>Ritual/Bath</b> [6UR] (decoction, other ritual) <b>APT</b> [6] <sup>SE</sup> : protective against jinn  <b>Oral</b> [4UR] (cold infusion (cold), hot infusion (hot), syrup) <b>PRC</b> [2]: induced abortion [1] <sup>NW</sup> , postpartum [1] <sup>SE</sup> <b>APT</b> [1] <sup>SE</sup> : protective against jinn <b>PAE</b> [1] <sup>SE</sup> : jaundice
<b>Juglandaceae</b>					
<i>Juglans regia</i> L. [18UR] <sup>NW&amp;SE</sup>	<i>Gerdu</i>	<i>(Givîz, Gala Givîz)<sup>Sor</sup>, (Gîz)<sup>Kur</sup></i>	<i>Józ</i>	Leaves [10UR] <sup>NW</sup>	<b>Oral</b> [7UR] (infusion (hot), decoction) <b>CRD</b> [2]: cardiovascular problems, hypertension <b>GID</b> [2]: gastric ulcer, flatulence <b>DIA</b> [2]: diabetes [2UR] <b>FEV</b> [1]: fever  <b>Topical</b> [3UR] (poultice and related preparations, bath) <b>MSK</b> [1]: bone and joint pain <b>SKN</b> [1]: wound <b>HEA</b> [1]: headache
				Fruit [4UR] <sup>NW</sup>	<b>Oral</b> [4UR] (grinding/crushing/pulverization) <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: diabetes <b>HEA</b> [1]: Alzheimer's disease [1: seeds] <sup>SE</sup> <b>WGS</b> [1]: female genitourinary infection [1: seeds] <sup>NW</sup>  <b>Topical</b> [4UR] (grinding/crushing/pulverization) <b>SKN</b> [2]: kharkaneh (see text), skin care <b>DNT</b> [2]: tooth whitening [2: subterrestrial parts] <sup>SE</sup>
<b>Lamiaceae</b>					
<i>Mentha longifolia</i> (L.) L. [157UR] <sup>NW&amp;SE</sup>	<i>Pune-ye Dombarg dâr</i>	<i>(Pûngah, Pîng, Pûng)<sup>Kur&amp;Sor</sup></i>	<i>Purchenk</i>	Leaves [109UR]	<b>Oral</b> [89UR] (decoction, hot infusion, grinding/crushing/pulverization) <b>GID</b> [27]: gastric pain [5] <sup>NW</sup> [8] <sup>SE</sup> , acid reflux [1] <sup>SE</sup> , dysentery1 [1] <sup>SE</sup> , steatosis [1] <sup>NW</sup> , gastric ulcer [3] <sup>NW</sup> [4] <sup>SE</sup> , intestinal pain [1] <sup>SE</sup> , gastric and intestine infection [3] <sup>NW</sup> <b>RES</b> [26]: asthma [4] <sup>NW</sup> [1] <sup>SE</sup> , pneumonia [4] <sup>NW</sup> , cold [3] <sup>NW</sup> , COVID-19 [4] <sup>NW</sup> [1] <sup>SE</sup> , pneumonia [4] <sup>NW</sup> , sore throat [5] <sup>NW</sup> <b>GNR</b> [13]: immunostimulant [1] <sup>NW</sup> , infection [12] <sup>NW</sup> <b>WGS</b> [6]: menstruation [4] <sup>NW</sup> , female genitourinary infection [2] <sup>NW</sup>

				<p><b>PRC</b> [5]: postpartum [3]<sup>NW</sup> [2]<sup>SE</sup>,  <b>PAE</b> [3]: colic [1]<sup>NW</sup> [1]<sup>SE</sup>, nocturnal enuresis [1]<sup>NW</sup>  <b>HEA</b> [3]: migraine [1]<sup>NW</sup>, headache [1]<sup>NW</sup> [1]<sup>SE</sup>  <b>SKN</b> [2]: pruritus [1]<sup>NW</sup>, warm temperament in the body [1]<sup>SE</sup>  <b>BLD</b> [1]: anemia [1]<sup>NW</sup>  <b>CRD</b> [1]: hyperlipidemia [1]<sup>SE</sup>  <b>DIA</b> [1]: diabetes [1]<sup>NW</sup>  <b>URO</b> [1]: kidney infection [1]<sup>NW</sup></p> <p><b>Topical</b> [10UR] (decoction + dehydration (grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, plaster, poultice and related preparations)  <b>SKN</b> [4]: burns [1]<sup>NW</sup>, wounds [2]<sup>NW</sup> [1]<sup>SE</sup>  <b>MSK</b> [2]: rheumatism [aerial parts], bone fracture [1]<sup>SE</sup>  <b>DNT</b> [1]: tooth whitening [1]<sup>SE</sup>  <b>GNR</b> [1]: pain [1]<sup>SE</sup>  <b>HEA</b> [1]: headache [1]<sup>NW</sup>  <b>WGS</b> [1]: female genitourinary infection [1]<sup>NW</sup></p> <p><b>Topical/Bath</b> [4UR]  <b>PRC</b> [1]: female infertility [1]<sup>NW</sup>  <b>SKN</b> [3]: pruritus [2; 1: aerial parts]<sup>NW</sup>, feet corn [1]<sup>NW</sup></p> <p><b>Topical/Steam bath</b> [7UR] (decoction)  <b>WGS</b> [4]: female genitourinary infection [2; 1: all parts]<sup>NW</sup>, uterine infection [2: aerial parts]<sup>NW</sup>  <b>MSK</b> [1]: rheumatism [1: flower]<sup>SE</sup>  <b>PRC</b> [2]: female infertility [2: flower, all parts]<sup>NW</sup></p> <p><b>Vaginal/Uterine</b> [3UR] (ointment/pomade/oil and fat based preparations)  <b>PRC</b> [1]: female infertility [1]<sup>NW</sup>  <b>WGS</b> [2]: female genitourinary infection [1]<sup>NW</sup>, ovarian injury [1]<sup>NW</sup></p> <p><b>Thermic vaporization/Aromatic vapor</b> [1UR]  <b>MSK</b> [1]: rheumatism [1]<sup>SE</sup></p>
			Flower or Inflorescence [22UR]	<p><b>Oral</b> [21UR] (decoction, grinding/crushing/pulverization, infusion (Cold), infusion (hot), syrup)  <b>GID</b> [14]: constipation [1]<sup>SE</sup>, diarrhea [3]<sup>SE</sup>, dysentery [1]<sup>SE</sup>, steatosis [1]<sup>SE</sup>, gastric ulcer [2]<sup>SE</sup>, gastric pain [2]<sup>SE</sup>, acid reflux [1]<sup>SE</sup>, intestinal pain [1]<sup>SE</sup>, flatulence [1]<sup>SE</sup>, gastric and intestine infection [1]<sup>NW</sup>  <b>RES</b> [3]: COVID-19 [1]<sup>NW</sup>, cold [1]<sup>SE</sup>, throat infection [1]<sup>NW</sup>  <b>PAE</b> [1]<sup>SE</sup>: hizeh (see text)</p>

					<b>PRC</b> [1] <sup>SE</sup> : postpartum infection <b>WGS</b> [1] <sup>NW</sup> : menstruation <b>CRD</b> [1] <sup>SE</sup> : hyperlipidemia  <b>Topical/Bath</b> [1UR] (decoction) <b>WGS</b> [1] <sup>NW</sup> : female genitourinary infection
			Subterrestrial parts [20UR]	<b>Buccal/Dental/Pharyngal</b> [1UR] (decoction) <b>DNT</b> [1]: dental pain [1] <sup>NW</sup>  <b>Oral</b> [19UR] <sup>SE</sup> (decoction, hot infusion) <b>DIA</b> [2] <sup>SE</sup> : reduce blood sugar <b>GID</b> [10] <sup>SE</sup> : constipation [2], diarrhea [1], dysentery [2], gastric ulcer [2], gastric pain [2], intestinal pain [1] <b>PAE</b> [1] <sup>SE</sup> : hizeh (see text) <b>PRC</b> [1] <sup>SE</sup> : postpartum <b>WGS</b> [5] <sup>SE</sup> : menstruation [3], uterine infection [2]	
<i>Mentha × piperita</i> L. [7UR] <sup>NW</sup>	<i>Nanā</i>	( <i>Nana filfilê</i> ) <sup>Sor</sup>		Aerial parts [7UR]	<b>Oral</b> [7UR] (hot infusion) <b>GID</b> [5]: constipation, flatulence, gastric pain gastroenteritis (leaves), nausea <b>SKN</b> [2]: pruritus, warm temperament in the body
<i>Nepeta avromanica</i> Jamzad& Serpoosh. [2UR] <sup>NW</sup>	Not know	( <i>Zofa</i> ) <sup>Sor</sup>		Aerial parts [2UR]	<b>Oral</b> [2UR] (hot infusion) <b>RES</b> [2]: cough
<i>Nepeta cataria</i> L. [6UR] <sup>NW</sup>	<i>Punesā-ye Gorbei, Nanāy-e Gorbei</i>	( <i>Gia sava</i> ) <sup>Sor</sup>		Leaves [6UR]	<b>Oral</b> [4UR] (hot infusion) <b>GID</b> [2]: gastric ulcer [2: leaves, stem] <b>SKN</b> [2]: pruritus  <b>Topical</b> [2UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: pruritus <b>CRD</b> [1]: hypertension [1: aerial parts]
<i>Nepeta glomerulosa</i> Boiss. [10UR] <sup>SE</sup>	<i>Punesā-ye Ānbuh</i>		<i>Samah kosh, Samah koshók</i>	Aerial parts [10UR]	<b>Oral</b> [10UR] (decoction) <b>INS</b> [6]: myiasis [6] [aerial parts, leaves, underground organs] <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: diabetes <b>GID</b> [1]: intestinal parasites <b>RES</b> [1]: COVID-19 [underground organs]
<i>Nepeta juncea</i> Benth. [6UR] <sup>SE</sup>	<i>Punesā-ye Baluĉestāni, Punesā-ye Sāzui</i>		<i>Samah kosh, Samah koshók</i>	Aerial parts [6UR]	<b>Oral</b> [6UR] (decoction, grinding/crushing/pulverization) <b>INS</b> [5]: myiasis [5; 2: leave& underground organs] <b>RES</b> [1]: COVID-19 [underground organs]

<i>Nepeta saccharata</i> Bunge. [7UR] <sup>SE</sup>	<i>Punesā-ye Širin</i>		<i>Samah koshók</i>	<i>Aerial parts</i> [7UR]	<b>Oral</b> [7UR] (decoction, infusion (hot), raw, grinding/crushing/pulverization) <b>INS</b> [4]: myiasis (4; 1: leaves) <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: diabetes <b>GID</b> [1]: intestinal parasites
<i>Nepeta</i> sp. [16UR] <sup>SE</sup>	<i>Punesā</i>		<i>Shemsók</i>	Leaves [16UR]	<b>Oral</b> [12UR] (grinding/crushing/pulverization, decoction) <b>BLD</b> [1]: anemia <b>GID</b> [5]: gastric pain [2], diarrhea, intestinal parasites, emesis <b>GNR</b> [2]: cancer/oncology, infection <b>POS</b> [3]: scorpion bite, snake bite [2] <b>RES</b> [1]: cold [flower]  <b>Rectal</b> [1UR] (rectal suppository) <b>WGS</b> [1]: uterine prolapse  <b>Topical</b> [3UR] (grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations) <b>POS</b> [2]: scorpion bite, snake bite <b>WGS</b> [1]: uterine prolapse
<i>Rydingia persica</i> (Burm.f.) Scheen & V.A. Albert. [47UR] <sup>SE</sup>	<i>Golder</i>		<i>Gólder</i>	Flower or Inflorescence [39UR]	<b>Oral</b> [28UR] (decoction, grinding/crushing/pulverization, infusion (cold), infusion (hot)) <b>MSK</b> [14]: bone and joint pain [12], arthritis, joint dislocation and effusion <b>DIA</b> [5]: reduces blood sugar <b>GNR</b> [4]: anti-addiction, Opioid-Induced hyperalgesia [2], pain <b>CRD</b> [2]: hypertension, hyperlipidemia <b>GID</b> [2]: stomachache <b>BLD</b> [1]: malaria <b>Topical</b> [5UR] (grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations): <b>MSK</b> [2]: bone and joint pain, bone fracture <b>GNR</b> [1]: pain <b>SKN</b> [1]: wounds <b>WGS</b> [1]: uterine prolapse  <b>Topical/Bath</b> [4UR] (decoction) <b>MSK</b> [2]: bone and joint pain <b>GNR</b> [1]: malt fever <b>PAE</b> [1]: jaundice  <b>Rectal</b> [2UR] (rectal suppository): <b>PRC</b> [1]: female infertility <b>WGS</b> [1]: uterine prolapse

				Leaves [8UR]	<b>Oral</b> [5UR] (decoction, infusion (cold), infusion (hot)) <b>MSK</b> [3]: bone and joint pain <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: reduces blood sugar  <b>Topical/Bath</b> [3UR] (decoction) <b>GNR</b> [1]: malt fever <b>MSK</b> [1]: bone and joint pain <b>PAE</b> [1]: jaundice
<i>Salvia abrotanoides</i> (Kar.) Sytsma. [20UR] <sup>SE</sup>	<i>Berāzambel dermanéi</i>		wèyk	Aerial parts [7UR]	<b>Topical/Steam bath</b> [7UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [7]: bone and joint pain [5], rheumatism [2]
				Leaves [13UR]	<b>Topical</b> [6UR] (ointment/pomade/oil and fat-based preparations) <b>GNR</b> [2]: pain <b>MSK</b> [2]: bone fracture <b>SKN</b> [2]: wounds  <b>Topical/Bath</b> [5UR] (decoction) <b>GNR</b> [2]: malt fever <b>INS</b> [2]: bee sting <b>SKN</b> [1]: allergic dermatitis  <b>Topical/Steam bath</b> [2UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [2]: bone and joint pain
<i>Salvia bracteata</i> Banks& Sol. [3UR] <sup>SE</sup>	<i>Maryamgoli</i>		( <i>Sho Bo</i> ) <sup>Sor</sup>	Flower or Inflorescence [3UR]	<b>Oral</b> [3UR] (infusion (hot)) <b>GNR</b> [1]: infection <b>HEA</b> [1]: headache <b>MSK</b> [1]: bone and joint pain
<i>Salvia macrosiphon</i> Boiss. [23UR] <sup>SE</sup>	<i>Maryam goli-ye lulei</i>		<i>Dân chami, Mór dāneh, Mór dānag, Mór</i>	Seeds [23UR]	<b>Ophthalmic</b> [11UR] (grinding/crushing/pulverization, raw) <b>EYE</b> [11]: ophthalmic trauma, eye infection, eye pain, ophthalmic/ocular cleaner  <b>Oral</b> [11UR] (decoction, grinding/crushing/pulverization, infusion (hot), raw) <b>RES</b> [6]: asthma [2], cough [4] <b>GID</b> [3]: stomachache <b>MSK</b> [1]: chest pain <b>EYE</b> [1]: ophthalmic/ocular cleaner  <b>Topical</b> [1UR] (ointment/pomade/oil and fat based preparations): <b>MSK</b> [1]: bone bruised
			Mór pózho, Mór	Aerial parts [1UR]	<b>Topical/Bath</b> [1UR] (decoction) <b>PAE</b> [1]: hizeh (see text)

<i>Salvia mirzayanii</i> Rech.f.& Esfand. [127UR] <sup>SE</sup>	<i>Maryamgoli-ye kār vāndari</i> , <i>Morpožo</i>			Leaves [125UR]	<p><b>Oral</b> [94UR] (decoction, direct thermal alteration, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, infusion (cold), infusion (hot), raw, syrup):  <b>GID</b> [64]: acid reflux, constipation, diarrhea [17], dysentery, vomiting [7], food poisoning [3], gastric colic, stomachache [24], gastric ulcer [2], gastroenteritis [5], nausea, steatosis  <b>URO</b> [7]: kidney pain [5], kidney stones [2]  <b>GNR</b> [5]: infection  <b>PAE</b> [4]: hizeh (see text) [3], colic  <b>PRC</b> [4]: postpartum [3], pregnancy-related palpitations  <b>CRD</b> [3]: hyperlipidemia  <b>DIA</b> [3]: reduces blood sugar  <b>MSK</b> [3]: bone and joint pain  <b>WGS</b> [1]: female genitourinary pain</p> <p><b>Topical</b> [26UR] (combustion/ashes, decoction, grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, poultice and related preparations)  <b>SKN</b> [13]: burns [6], wounds [6], scars  <b>MSK</b> [3]: arthritis, bone fracture, contusion  <b>GNR</b> [2]: pain  <b>MSK</b> [2]: contusion, bone and joint pain  <b>HEA</b> [2]: headache  <b>PRC</b> [2]: postpartum  <b>WGS</b> [1]: uterine prolapse  <b>EYE</b> [1]: allergic conjunctivitis</p> <p><b>Vaginal/Uterine</b> [3UR] (decoction, grinding/crushing/pulverization + therm. alteration)  <b>PRC</b> [2]: female infertility  <b>WGS</b> [1]: female genitourinary pain</p> <p><b>Rectal</b> [2UR] (grinding/crushing/pulverization, rectal suppository)  <b>PRC</b> [2]: female infertility, uterine prolapse</p>
				Seeds [1UR]	<p><b>Oral</b> [1UR] (direct thermal alteration)  <b>RES</b> [1]: cough</p>
<i>Salvia nemorosa</i> L. [10UR] <sup>NW</sup>	<i>Maryamgoli mazra'ery</i>	<i>(Golūl Gašīn, Gola Šīng, Golīl Gašyin)</i> <sup>Kur</sup>		Aerial parts [2UR]	<p><b>Topical/Bath</b> [2UR] (decoction)  <b>PRC</b> [1]: female infertility  <b>WGS</b> [1]: female genitourinary infection</p>
				All parts [3UR]	<p><b>Topical/Bath</b> [1UR] (decoction)  <b>GNR</b> [1]: weight loss</p> <p><b>Topical/Steam bath</b> [1UR] (decoction)  <b>PRC</b> [1]: female infertility</p>

					<b>Oral</b> [1UR] (infusion (hot)) <b>GNR</b> [1]: weight loss
				Flower or Inflorescence [2UR]	<b>Oral</b> [1UR] (decoction) <b>GID</b> [1]: gastroenteritis  <b>Topical/Bath</b> [1UR] (decoction) <b>PRC</b> [1]: female infertility
				Leaves [3UR]	<b>Topical/Bath</b> [2UR] (decoction) <b>PRC</b> [1]: female infertility <b>WGS</b> [1]: female genitourinary infection  <b>Oral</b> [1UR] (infusion(hot)) <b>HEA</b> [1]: insomnia
<i>Salvia santolinifolia</i> Boiss. [14UR] <sup>SE</sup>	<i>Maryamgoli-ye Xaliji</i>		<i>Budaku, Budko</i>	Aerial parts [11UR]	<b>Topical/Bath</b> [6UR] (decoction) <b>PAE</b> [6]: hizeh (see text)  <b>Oral</b> [5UR] (decoction) <b>PAE</b> [3]: colic, hizeh (see text) [2] <b>CRD</b> [1]: cardiovascular problems <b>GID</b> [1]: diarrhea
				Flower or Inflorescence [2UR]	<b>Oral</b> [1UR] (decoction) <b>GID</b> [1]: stomachache  <b>Topical/Bath</b> [1UR] (decoction) <b>PAE</b> [1]: hizeh (see text)
				Leaves [1UR]	<b>Oral</b> [1UR] (decoction) <b>GID</b> [1]: stomachache
<i>Stachys annua</i> (L.) L. [2UR] <sup>NW</sup>	-	( <i>Heoa</i> ) <sup>Kur</sup>		Flower or Inflorescence [2UR]	<b>Oral</b> [2UR] (decoction) <b>GID</b> [1]: gastric ulcer <b>RES</b> [1]: cough
<i>Stachys lavandulifolia</i> Vahl. [30UR] <sup>SE</sup>	<i>Sonbol-e Zibā, Čay-e Kuhi</i>	(Çay kûhê, Marzan gûş, Goli çay, Gia çay) <sup>Sor</sup>		Aerial parts [14UR]	<b>Oral</b> [14UR] (infusion (hot)) <b>GNR</b> [5]: anaphylaxis, infection [4] <b>HEA</b> [4]: clamant/sedative, headache, migraine, nervous reinforcement <b>CRD</b> [2]: cardiovascular problems <b>GID</b> [2]: stomachache, gastric ulcer <b>RES</b> [1]: asthma
				Flower or Inflorescence [10UR]	<b>Oral</b> [10UR] (infusion (hot)) <b>HEA</b> [6]: clamant/sedative, headache, nervous reinforcement, vertigo <b>GID</b> [3]: constipation, stomachache [2] <b>BLD</b> [1]: blood purification

				Leaves [5UR]	<b>Oral</b> [5UR] (decoction, infusion (hot)) <b>GID</b> [2]: constipation, stomachache <b>CRD</b> [1]: cardiovascular problems <b>BLD</b> [1]: blood purification <b>HEA</b> [1]: clamant/sedative
				Subterrestrial parts [1UR]	<b>Oral</b> [1UR] (decoction) <b>GID</b> [1]: intestinal parasites
<i>Teucrium gabrieliae</i> Bornm. [12] <sup>SE</sup>	<i>Maryam noxodi-ye Taftāni</i>		<i>Kalpureh</i>	Aerial parts [10UR]	<b>Oral</b> [7UR] (decoction, infusion (hot)) <b>GID</b> [5]: dysentery, gastric colic, stomachache <b>PAE</b> [2]: infantile diarrhea, vomiting, fever  <b>Topical</b> [3UR] (ointment/pomade/oil and fat-based preparations) <b>MSK</b> [2]: arthritis, contusion <b>HEA</b> [1]: headache
				Flower or Inflorescence [2UR]	<b>Oral</b> [2UR] (decoction) <b>GID</b> [2]: gastric colic, stomachache
<i>Teucrium polium</i> L. [16UR] <sup>NW</sup>	<i>Kalpüre-ye Espāniāi, Maryam Noxodi-ye Espāniāi</i>	<i>(Boxoşke)</i> <sup>Sor</sup> , <i>(Gía Sancû)</i> <sup>Kur</sup>		Aerial parts [15UR]	<b>Oral</b> [10UR] (decoction, infusion (hot)): <b>GNR</b> [3]: infection, pain <b>DIA</b> [2]: reduces blood sugar <b>GID</b> [1]: stomachache <b>SKN</b> [1]: skin care <b>CRD</b> [1]: hypertension <b>RES</b> [1]: cold <b>WGS</b> [1]: reduces menstruation bleeding  <b>Topical</b> [2UR] (grinding/crushing/pulverization) <b>HEA</b> [2]: headache  <b>Topical/Bath</b> [1UR] (decoction) <b>SKN</b> [1]: allergic dermatitis  <b>Topical/Steam bath</b> [2UR] (decoction) <b>HEA</b> [1]: headache <b>SKN</b> [1]: infectious injury
				Flower or Inflorescence [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>GID</b> [1]: steatosis
<i>Teucrium stocksianum</i> Boiss. [100UR] <sup>SE</sup>	<i>Maryam noxodi-ye Taftāni</i>		<i>Kalpüre, Kalpurag</i>	Aerial parts [95UR]	<b>Oral</b> [63UR] (decoction, grinding/crushing/pulverization, infusion (hot), syrup) <b>GID</b> [30]: diarrhea [4], dysentery [4], vomiting [3], gastric colic [2], stomachache [12], food poisoning, gastric fullness, gastric ulcer [1], intestinal cancer [1]

				<p><b>PAE</b> [9]: gastrointestinal motility [2], infantile anorexia with diarrhea [1], hizeh (see text) [5], colic</p> <p><b>CRD</b> [9]: cardiovascular problems [4], hyperlipidemia [3], hypertension [2]</p> <p><b>DIA</b> [7]: reduces blood sugar</p> <p><b>MSK</b> [3]: bone and joint pain [2], rheumatism</p> <p><b>GNR</b> [2]: pain</p> <p><b>PRC</b> [2]: postpartum</p> <p><b>BLD</b> [1]: blood diluting</p> <p><b>SKN</b> [1]: warm temperament in the body</p> <p><b>Topical</b> [20UR] (decoction, grinding/crushing/pulverization, grinding/crushing/pulverization + therm. alteration, ointment/pomade/oil and fat based preparations, skin mask/lotion, plaster, poultice and related preparations)</p> <p><b>SKN</b> [8]: coagulating injury, infectious gland on skin [2], deep skin injury, skin wounds [3], warm temperament in the body</p> <p><b>PAE</b> [3]: intestinal parasitic infestation, baby grinding/crushing/pulverization, jaundice</p> <p><b>PRC</b> [3]: postpartum</p> <p><b>WGS</b> [1]: pain in breast</p> <p><b>GNR</b> [1]: pain</p> <p><b>MSK</b> [1]: bone fractures</p> <p><b>INS</b> [1]: insect bite</p> <p><b>VEN</b> [1]: scorpion sting</p> <p><b>MSK</b> [1]: contusion</p> <p><b>Topical/Bath</b> [4UR] (decoction, lotion)</p> <p><b>GID</b> [2]: diarrhea, vomiting</p> <p><b>PAE</b> [2]: hizeh (see text), jaundice</p> <p><b>Vaginal/Uterine</b> [4UR] (vaginal ovule)</p> <p><b>PRC</b> [2]: postpartum, postpartum infections</p> <p><b>WGS</b> [2]: uterine pain, uterine prolapse</p> <p><b>Topical/Smoke</b> [3UR] (incense/smoke)</p> <p><b>EAR</b> [2]: ear infection</p> <p><b>INS</b> [1]: ear insect infestation</p> <p><b>Rectal</b> [1UR] (rectal suppository)</p> <p><b>PRC</b> [1]: female infertility</p>
			Flower or Inflorescence [5UR]	<p><b>Oral</b> [5UR] (grinding/crushing/pulverization, infusion (hot))</p> <p><b>GID</b> [3]: gastric ulcer, duodenal cancer, stomachache [1]</p>

					<b>GNR</b> [1]: pain <b>MSK</b> [1]: bone and joint pain
<i>Thymus daenensis</i> Čelak. [32UR] <sup>NW</sup>	<i>Āvišan-e Denāi</i>	( <i>Jatri, Jatri Kavēli</i> ) <sup>Sor</sup>		Aerial parts [1UR]	<b>Oral</b> [1UR] (grinding/crushing/pulverization) <b>WGS</b> [1]: ovary cyst
				Leaves [31UR]	<b>Oral</b> [24UR] (infusion (hot)) <b>RES</b> [9]: asthma, cold [2], cough [2], throat infections [3], tonsillitis <b>GID</b> [8]: diarrhea, vomiting [2], stomachache [5] <b>GNR</b> [2]: infection <b>HEA</b> [2]: headache, nervous reinforcement <b>URO</b> [1]: kidney infection <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: reduces blood sugar  <b>Topical</b> [3UR] (grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, poultice and related preparations): <b>SKN</b> [3]: burns [2], wounds  <b>Topical/Steam bath</b> [1UR] (decoction) <b>HEA</b> [1]: migraine  <b>Vaginal/Uterine</b> [3UR] (vaginal ovule) <b>WGS</b> [2]: female genitourinary infection, ovarian injury <b>PRC</b> [1]: female infertility
<i>Thymus migricus</i> Klokov& Des. - Shost. [55UR] <sup>NW</sup>	<i>Āvišan-e Āzarbāyējāni</i>	( <i>Catri</i> ) <sup>Kur&amp;Sor</sup> , ( <i>Cata, Cati</i> ) <sup>Kur</sup>		Aerial parts [7UR]	<b>Oral</b> [3UR] (decoction) <b>GID</b> [1]: stomachache <b>GNR</b> [1]: infection <b>RES</b> [1]: cough  <b>Topical/Bath</b> [4UR] (decoction) <b>WGS</b> [3]: female genitourinary infection, uterine infection, vaginal bad smell <b>SKN</b> [1]: pruritus
				Leaves [48UR]	<b>Oral</b> [41UR] (decoction, infusion (hot)) <b>RES</b> [14]: cold [3], COVID-19 [3], pneumonia [3], throat infection [3], cough [2] <b>GNR</b> [8]: infection <b>WGS</b> [6]: ministration [5], uterine cysts <b>GID</b> [6]: stomachache [4], gastric ulcer, gastroenteritis <b>PRC</b> [4]: postpartum [4] <b>BLD</b> [1]: anemia <b>PAE</b> [1]: colic <b>URO</b> [1]: kidney pain

					<p><b>Topical</b> [3UR] (plaster, poultice and related preparations)  <b>WGS</b> [1]: female genitourinary infection  <b>GID</b> [1]: constipation  <b>HEA</b> [1]: headache</p> <p><b>Topical/Bath</b> [2UR] (decoction)  <b>PRC</b> [1]: female infertility  <b>WGS</b> [1]: female genitourinary infection</p> <p><b>Topical/Steam bath</b> [2UR] (decoction)  <b>WGS</b> [2]: female genitourinary infection</p>
<i>Thymus pubescens</i> Boiss.& Kotschy ex Čelak. [28UR] <sup>NW</sup>	<i>Āvišan-e Kork</i> <i>Ālud</i>	(Hazbi, Hazbi <i>Kafêli</i> ) <sup>Sor</sup>		Aerial parts [6UR]	<p><b>Oral</b> [6UR] (infusion (hot))  <b>GID</b> [2]: appetizer, stomachache  <b>WGS</b> [2]: reduces menstrual pain, female genitourinary infection  <b>GNR</b> [1]: infection  <b>RES</b> [1]: cold</p>
				Leaves [22UR]	<p><b>Oral</b> [22UR] (decoction, infusion (hot))  <b>RES</b> [13]: asthma [5], cold [3], cough [3], COVID-19, throat infection  <b>GNR</b> [3]: anaphylaxis, cancer, infection  <b>HEA</b> [2]: headache  <b>GID</b> [2]: stomachache  <b>PRC</b> [1]: infection in pregnancy  <b>FEV</b> [1]: fever</p>
<i>Zataria multiflora</i> Boiss. [105UR] <sup>SE</sup>	<i>Āvišan-e Širāzi</i>		<i>Ezgend</i>	Leaves [105UR]	<p><b>Oral</b> [86UR] (decoction, direct thermal alteration, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, grinding/crushing/pulverization + therm. alteration, infusion (hot), infusion in milk)  <b>RES</b> [41]: asthma [2], cold[25], cough [9], sore throat [2], throat infections [2], COVID-19 [5], pneumonia  <b>GNR</b> [14]: food allergies [4], pain, anaphylaxis, pain, cancer [1], chills, infections [5]  <b>GID</b> [6]: flatulence, gastric ulcer [2], dysentery, stomachache [2]  <b>PRC</b> [6]: induced abortion [2], induction of labor, postpartum [3]  <b>URO</b> [5]: kidney pain [4], bladder infection  <b>SKN</b> [5]: allergic dermatitis [3], skin wounds, pruritus  <b>MSK</b> [4]: bone injuries, Bone and joint pain [3]  <b>WGS</b> [2]: menstruation induction, reduction of menstrual pain  <b>CRD</b> [1]: cardiovascular problems  <b>FEV</b> [1]: fever  <b>HEA</b> [1]: clamant/sedative</p> <p><b>Ritual/Bath</b> [1UR]  <b>APT</b>[1]: protective</p>

					<p><b>Topical</b> [7UR] (decoction + dehydration, ointment/pomade/oil and fat-based preparations)  <b>SKN</b> [3]: infectious gland on skin and throat, skin wounds  <b>RES</b> [1]: cold  <b>GNR</b> [1]: pain  <b>MSK</b> [1]: bone fracture  <b>PRC</b> [1]: postpartum uterine contractions</p> <p><b>Topical/Bath</b> [2UR] (decoction, infusion (hot))  <b>SKN</b> [2]: fungal infections</p> <p><b>Topical/Smoke</b> [7UR] (incense/smoke)  <b>INS</b> [1]: bee sting  <b>SKN</b> [6]: allergic dermatitis, fungal infection, pruritus</p> <p><b>Topical/Steam bath</b> [2UR] (decoction)  <b>RES</b> [2]: cold, COVID-19</p> <p><b>Vaginal/Uterine</b> [1UR] (decoction + dehydration)  <b>PRC</b> [1]: female infertility</p>
<i>Ziziphora clinopodioides</i> Lam. [37UR] <sup>NW&amp;SE</sup>	<i>Kākuti-ye Kuhi</i>	<i>(Nana)<sup>Kur&amp;Sor</sup>, (Catri, Catri Abî)<sup>Sor</sup></i>	<i>Purchenkó, Áláleh, Gole lálá, Purchenk kóhi</i>	Aerial parts [1UR]	<p><b>Oral</b> [1UR] (grinding/crushing/pulverization)  <b>WGS</b> [1]<sup>NW</sup>: breast cysts</p>
				Flower or Inflorescence [8UR]	<p><b>Oral</b> [8UR] (grinding/crushing/pulverization + formulation; infusion)  <b>CRD</b> [3]: cardiovascular problems [2]<sup>SE</sup>, hypertension [1]<sup>NW</sup>  <b>GID</b> [2]: dysentery [1]<sup>SE</sup>, food poisoning [1]<sup>SE</sup>  <b>GNR</b> [1]<sup>SE</sup>: pain  <b>HEA</b> [1]<sup>SE</sup>: nerve clamant  <b>RES</b> [1]<sup>SE</sup>: cold</p>
				Leaves [25UR]	<p><b>Oral</b> [24UR] (decoction, infusion (hot), raw)  <b>GID</b> [7]: diarrhea [1]<sup>NW</sup>, food poisoning [1]<sup>NW</sup>, stomachache[2]<sup>NW</sup>, gastric ulcer [1]<sup>SE</sup>,  Gastroenteritis [2]<sup>SE</sup>  <b>RES</b> [6]: cold [2]<sup>NW</sup> [1]<sup>SE</sup>, COVID-19 [1]<sup>NW</sup> [1]<sup>SE</sup>, pneumonia [1]<sup>NW</sup>  <b>HEA</b> [3]: nerve clamant [1]<sup>SE</sup>  <b>CRD</b> [3]<sup>SE</sup>: cardiovascular problems  <b>SKN</b> [2]<sup>SE</sup>: warm temperament in the body  <b>MSK</b> [1]<sup>NW</sup>: bone and joint pain  <b>GID</b> [1]<sup>NW</sup>: gastric ulcer  <b>GNR</b> [1]<sup>SE</sup>: pain</p> <p><b>Topical/Steam bath</b> [1UR] (decoction)  <b>HEA</b> [1]<sup>NW</sup>: migraine</p>

				Subterrestrial parts [3UR]	<b>Oral</b> [3UR] (decoction, infusion (hot)) <b>GID</b> [2]: constipation, stomachache <b>URO</b> [1]: urinary incontinence
<i>Ziziphora tenuior</i> L. [3UR] <sup>NW&amp;SE</sup>	<i>Kākuti</i>	( <i>Bay Bū</i> ) <sup>Kur</sup>	<i>Purchenkó</i>	All parts [2UR]	<b>Oral</b> [2UR] (infusion (hot)) <b>GNR</b> [1] <sup>NW</sup> : pain <b>RES</b> [1] <sup>NW</sup> : asthma <b>HEA</b> [1] <sup>SE</sup> : clamant/sedative [1: leaves]
<b>Lauraceae</b>					
<i>Cinnamomum verum</i> J.Presl. [19UR] <sup>NW&amp;SE</sup>	<i>Dārchin</i>	Darçin	<i>Dārchin</i>	Bark [19UR]	<b>Oral</b> [18UR] (decoction, infusion (hot), direct thermal alteration (grill, fry, roast, heat, boil, vapor), grinding/crushing/pulverization) <b>PRC</b> [8] <sup>SE</sup> : postpartum [7], induced abortion <b>RES</b> [6] <sup>SE</sup> : cold [3], COVID-19 [3] <b>URO</b> [2] <sup>SE</sup> : kidney stone [2] <b>WGS</b> [2]: menstruation [1] <sup>NW</sup> [1] <sup>SE</sup>  <b>Topical (bath)</b> [1UR] <b>RES</b> [1] <sup>SE</sup> : sinusitis
<b>Loranthaceae</b>					
<i>Loranthus europaeus</i> Jacq. [11UR] <sup>NW</sup>	<i>Moxor</i>	(Damkani, <i>Damúki</i> ) <sup>Sor</sup>		Fruit [8UR]	<b>Oral</b> [1UR] (grinding/crushing/pulverization) <b>GID</b> [1]: intestinal parasites  <b>Topical</b> [7UR] (grinding/crushing/pulverization, poultice and related preparations) <b>MSK</b> [2]: bone fracture, Joint effusion <b>SKN</b> [5]: houshkeh biro (see text), kharkaneh (see text), depilation [2], wound infections [latex], urticarial
				Twigs [2UR]	<b>Oral</b> [2UR] (decoction) <b>GNR</b> [2]: cancer/oncology [2]
				Leaves [1UR]	<b>Oral</b> [1UR] (decoction) <b>HEA</b> [1]: headache
<b>Lythraceae</b>					
<i>Lawsonia inermis</i> L. [26UR] <sup>NW&amp;SE</sup>	<i>Hana</i>	( <i>Hana</i> ) <sup>Kur&amp;Sor</sup>	<i>Haná</i>	Leaves [26UR]	<b>Topical</b> [26UR] (grinding/crushing/pulverization, poultice and related preparations, plaster) <b>SKN</b> [14]: pruritus [3] <sup>NW</sup> [1] <sup>SE</sup> , kharkaneh (see text) [2] <sup>NW</sup> , warm temperament in the body [1] <sup>SE</sup> , fungal infection [1] <sup>NW</sup> , scalp and hair care [3] <sup>NW</sup> , skin care [1] <sup>NW</sup> , wound [1] <sup>NW</sup> , feet corn [1] <sup>NW</sup> <b>HEA</b> [6]: stroke [1] <sup>NW</sup> , headache [5] <sup>NW</sup> <b>MSK</b> [3]: bone and joint pain [1] <sup>NW</sup> , waist disk [1] <sup>NW</sup> , arthritis [1] <sup>NW</sup> <b>RES</b> [1] <sup>NW</sup> : cold <b>INS</b> [1] <sup>NW</sup> : head lice
<i>Punica granatum</i> L. [27UR] <sup>NW&amp;SE</sup>	<i>Ānār vahši</i>		<i>Anár</i>	Flower or Inflorescence [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>GNR</b> [1] <sup>SE</sup> : infection

				Fruit [20UR]	<p><b>Oral</b> [8UR] (decoction, decoction + dehydration, direct thermal alteration, raw, syrup, grinding/crushing/pulverization)  <b>GID</b> [5]<sup>SE</sup>: gastric, intestinal parasites, gastric ulcer [2], food digestion  <b>GNR</b> [1]<sup>SE</sup>: infection  <b>PAE</b> [1]<sup>SE</sup>: hizeh (see text)  <b>WGS</b> [1]<sup>NW</sup>: menstruation</p> <p><b>Topical</b> [5UR] (decoction + dehydration, grinding/crushing/pulverization, plaster, poultice and related preparations)  <b>MSK</b> [3]<sup>SE</sup>: bone fracture [2], arthritis  <b>SKN</b> [1]<sup>NW</sup>: perioral dermatitis  <b>WGS</b> [1]<sup>SE</sup>: uterine prolapse</p> <p><b>Topical/Bath</b> [4UR] (decoction, raw)  <b>PRC</b> [3]: female infertility [1]<sup>NW</sup>, postpartum [1]<sup>NW</sup> [1]<sup>SE</sup>  <b>WGS</b> [1]<sup>NW</sup>: female genitourinary infection</p> <p><b>Vaginal/Uterine</b> [2UR] (grinding/crushing/pulverization)  <b>PRC</b> [1]<sup>SE</sup>: female infertility  <b>WGS</b> [1]<sup>SE</sup>: exiting water from vagina</p> <p><b>Buccal/Dental/Pharyngal</b> [1UR] (decoction)  <b>SKN</b> [1]<sup>NW</sup>: skin care</p>
				Leaves [6UR]	<p><b>Topical</b> [6UR]<sup>SE</sup> (decoction + dehydration, plaster)  <b>MSK</b> [5]: arthritis, bone fracture, joint dislocation and effusion  <b>SKN</b> [1]: wounds</p>
<b>Malvaceae</b>					
<i>Alcea kurdica</i> (Schltdl.) Alef. [59 UR] <sup>NW</sup>	<i>Xatmi-ye Kordi</i>	( <i>Hiro, Goli</i> <i>Hiro, Harmala,</i> <i>Goli</i> <i>Harmala</i> ) <sup>Sor</sup>		Flower or Inflorescence [57UR]	<p><b>Oral</b> [38UR] (infusion (hot), decoction, direct thermal alteration (grill, fry, roast, heat, boil, vapor))  <b>RES</b> [14]: asthma [3], cough [4], pneumonia [4], cold, sore throat [2]  <b>GNR</b> [8]: cancer [1], infection [7]  <b>HEA</b> [5]: clamant/sedative, headache [3], nervous reinforcement  <b>SKN</b> [4]: infectious injury, scalp and hair care [3]  <b>GID</b> [3]: stomachache [2], gastric ulcer  <b>CRD</b> [1]: heart problem  <b>MSK</b> [1]: bone and joint pain  <b>URO</b> [1]: kidney infection  <b>WGS</b> [1]: female genitourinary infection</p> <p><b>Topical</b> [13UR] (grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations, poultice and related preparations]</p>

					<p><b>GNR</b> [1]: pain  <b>EYE</b> [1]: eye pain  <b>PRC</b> [1]: female infertility  <b>SKN</b> [5]: face lightening, skin wounds, burn, diabetic foot injury, skin wounds  <b>WGS</b> [2]: female genitourinary infection, ovarian injury  <b>VAB</b> [1]: scorpion sting  <b>HEA</b> [2]: headache 1; subterrestrial parts], stroke [1; subterrestrial parts]</p> <p><b>Topical/Bath</b> [6UR] (decoction)  <b>SKN</b> [6]: scalp and hair care [2], shampoo [4]</p> <p><b>Ophthalmic</b> [2UR] (infusion (milk))  <b>EYE</b> [2]: eye infection, eye pain</p>
<i>Alcea rechingeri</i> (Zohary) I.Riedl. [1UR] <sup>NW</sup>	<i>Xatmi-ye Arbili</i>	( <i>Goli Hero</i> ) <sup>Sor</sup>		Flower or Inflorescence [1UR]	<p><b>Oral</b> [1UR] (direct thermal alteration (grill, fry, roast, heat, boil, vapor))  <b>GID</b> [1]: stomachache</p>
<i>Alcea xanthochlora</i> I.Riedl [40] <sup>NW</sup>	<i>Xatmi-ye Jolfāi</i> , <i>Xatmi-ye Zard</i>	(Hiro, Hio) <sup>Kur</sup>		Flower or Inflorescence [37UR]	<p><b>Oral</b> [30UR] (infusion (hot), decoction)  <b>GID</b> [9]: gastric pain [2], gastric and intestine infection [4], gastric ulcer [2], hemorrhoid  <b>RES</b> [7]: asthma, cough, lung infection [2], sore throat [2], throat infection  <b>GNR</b> [6]: infection [5], pain  <b>WGS</b> [2]: vaginal bad smelling, uterus infection  <b>DNT</b> [1]: teeth infection  <b>HEA</b> [1]: headache  <b>MSK</b> [1]: knee arthritis  <b>PRC</b> [1]: stop bleeding post-abortion  <b>SKN</b> [1]: pruritus  <b>URO</b> [1]: kidney pain</p> <p><b>Topical</b> [4UR] (poultice, bath, grinding/crushing/pulverization, poultice and related preparations,  <b>MSK</b> [2]: bone and joint pain, arthritis  <b>SKN</b> [2]: burns [2]</p> <p><b>Topical/Bath</b> [2UR] (decoction)  <b>WGS</b> [1]: uterine infection  <b>PRC</b> [1]: female infertility</p> <p><b>Topical/Steam bath</b> [1UR] (decoction)  <b>WGS</b> [1]: female genitourinary infection</p>
				All parts [3UR]	<p><b>Topical</b> [1UR] (poultice and related preparations)  <b>GNR</b> [1]: edema</p>

					<b>Topical/Bath</b> [2UR] (decoction) <b>PRC</b> [1]: post-abortion <b>WGS</b> [1]: female genitourinary infection
<i>Malva sylvestris</i> L. [45UR] <sup>NW</sup>	<i>Panirak</i> <i>Qermez</i> , <i>Panirak</i>	<i>(Mam totak, Tolka)</i> <sup>Kur</sup> , <i>(Tolaka, Nana cuca)</i> <sup>Sor</sup> , <i>(Tolak)</i> <sup>Kur&amp;Sor</sup> ,		Leaves [4UR]	<b>Direct thermal alteration</b> [3UR] (grill, fry, roast, heat, boil, vapor) <b>GID</b> [2]: flatulence, gastroenteritis [underground organs] <b>GNR</b> [1]: infection  <b>Oral</b> [2UR] [decoction, hot infusion] <b>GNR</b> [1]: infection <b>SKN</b> [1]: wound [1]
				Aerial parts [28UR]	<b>Oral</b> [15UR] (decoction, infusion (hot)) <b>GNR</b> [6]: infection [6] <b>RES</b> [4]: cold [3], COVID-19 <b>GID</b> [2]: laxative, gastric pain <b>HEA</b> [1]: headache <b>PRC</b> [1]: postpartum <b>SKN</b> [1]: skin care  <b>Topical</b> [4UR] [poultice and related preparations] <b>SKN</b> [3]: wound [3] <b>WGS</b> [1]: female genitourinary infection  <b>Topical/Bath</b> [8UR] (decoction) <b>WGS</b> [6]: female genitourinary infection [3], uterine infection, vaginal odor due to bacterial vaginosis, vaginal itching <b>PRC</b> [1]: female infertility <b>SKN</b> [1]: pruritus  <b>Topical/Steam bath</b> [1UR](decoction) <b>WGS</b> [1]: female genitourinary infection
				All parts [5UR]	<b>Oral</b> [2UR] (hot infusion, decoction) <b>GID</b> [1]: intestinal parasites <b>WGS</b> [1]: menstruation  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: skin wounds  <b>Topical/Bath</b> [1UR] (decoction) <b>PRC</b> [1]: female infertility [1]

					<b>Vaginal/Uterine</b> [1UR] (decoction) <b>PRC</b> [1]: female infertility [1]
				Flower or Inflorescence [4UR]	<b>Oral</b> [6UR] (decoction, infusion (hot)) <b>GNR</b> [2]: infection [2; 1: fruit] <b>MGS</b> [2]: prostatitis [2; 1: fruit] <b>RES</b> [2]: cough [2; 1: fruit]  <b>Topical</b> [1UR] (poultice and related preparations) <b>MSK</b> [1]: arthritis
<b>Moraceae</b>					
<i>Morus alba</i> L. [13UR] <sup>NW&amp;SE</sup>	<i>Tut-e Sefid, Tut-e Harāti</i>	(Tû) <sup>Sor</sup>	<i>Tut</i>	Latex [3UR]	<b>Oral</b> [2UR] (raw, decoction) <b>CRD</b> [1] <sup>NW</sup> : hyperlipidemia <b>PRC</b> [1] <sup>NW</sup> : induced abortion  <b>Topical</b> (grinding/crushing/pulverization) <b>SKN</b> [1] <sup>SE</sup> : scalp and hair care
				Leaves [3UR]	<b>Oral</b> [3UR] (infusion (hot)) <b>GNR</b> [2] <sup>NW</sup> : infection, weight loss <b>GID</b> [1] <sup>SE</sup> : vomiting
				Fruit [7UR]	<b>Oral</b> [7UR] (raw, hot infusion) <b>HEA</b> [3] <sup>NW</sup> : dizzy, clamant/sedative, headache <b>GID</b> [2]: gastric pain [1] <sup>NW</sup> , emesis [1] <sup>SE</sup> <b>GNR</b> [2] <sup>NW</sup> : infection, weight loss
<b>Myrtaceae</b>					
<i>Myrtus communis</i> L. [19UR] <sup>SE</sup>	<i>Murd</i>		<i>Mórt</i>	Leaves [19UR]	<b>Topical</b> [7UR] (combustion/ashes, poultice, bath, grinding/crushing/pulverization) <b>GNR</b> [1]: pain <b>SKN</b> [3]: burns, wound infections, bedsores <b>PAE</b> [3]: baby grinding/crushing/pulverization [2], skin infection  <b>Topical/Smoke</b> [6UR] (incense/smoke) <b>INS</b> [1]: bee sting <b>SKN</b> [5UR]: allergic dermatitis [3], pruritus [2]  <b>Oral</b> [3UR] (decoction, direct thermal alteration (grill, fry, roast, heat, boil, vapor)) <b>SKN</b> [3]: pruritus, allergic dermatitis [2]  <b>Topical/Bath</b> [2UR] (decoction) <b>SKN</b> [2]: allergic dermatitis  <b>Ritual/Smoke</b> [1UR] (incense/smoke) <b>GNR</b> [1]: air disinfectant

<b>Nitrariaceae</b>				
<i>Peganum harmala</i> L. [117UR] <sup>NW&amp;SE</sup>	<i>Esfand</i>	<i>Espanol</i> , ( <i>Úzalak</i> ) <sup>Kur&amp;Sor</sup>	<i>Dudni</i> , <i>Espantán</i> , <i>Espantán</i> <i>syáh</i>	<p>Seeds [101UR]</p> <p><b>Oral</b> [36UR] (decoction, grinding/crushing/pulverization, infusion (hot), raw)  <b>GID</b> [21]: gastric pain [4]<sup>NW</sup> [1]<sup>SE</sup>, diarrhea [3]<sup>SE</sup>, dysentery [2]<sup>SE</sup>, food poisoning [4]<sup>SE</sup>, cholera [1]<sup>SE</sup>, gastric ulcer [3]<sup>NW</sup> [2]<sup>SE</sup>, flatulence [1]<sup>SE</sup>  <b>PRC</b> [8]<sup>SE</sup>: induced abortion [4], postpartum [3], induction of labor [1]  <b>URO</b> [5] kidney pain [2]<sup>NW</sup>, kidney stone [3]<sup>SE</sup>  <b>GNR</b> [1]<sup>NW</sup>: weight loss</p> <p><b>Ritual/Smoke</b> [36UR] (incense/smoke)  <b>APT</b> [29]: protective against Jinn's, black magic and evil eye [9]<sup>NW</sup> [21]<sup>SE</sup>  <b>PAE</b> [1]<sup>SE</sup>: evil eye  <b>GNR</b> [5]: air disinfectant [2]<sup>NW</sup> [3]<sup>SE</sup>  <b>RES</b> [1]<sup>NW</sup>: cold</p> <p><b>Topical/Smoke</b> [13UR] (incense/smoke)  <b>APT</b> [1]<sup>SE</sup>: protective  <b>FEV</b> [1]<sup>SE</sup>: fever  <b>GNR</b> [2]: chills [1]<sup>SE</sup>, pain [1]<sup>SE</sup>  <b>HEA</b> [3]: headache [2]<sup>NW</sup>, migraine [1]<sup>NW</sup>  <b>RES</b> [5]: cold [1]<sup>NW</sup> [2]<sup>SE</sup>, COVID-19 [2]<sup>SE</sup>  <b>SKN</b> [1]<sup>SE</sup>: burns [1]</p> <p><b>Topical</b> [10UR] (decoction, grinding/crushing/pulverization, grinding/crushing/pulverization + therm. alteration, ointment/pomade/oil and fat based preparations)  <b>MSK</b> [1]<sup>SE</sup>: contusion  <b>SKN</b> [3]<sup>SE</sup>: wounds[3]  <b>INS</b> [1]<sup>NW</sup>: head lice  <b>GNR</b> [2]<sup>SE</sup>: pain [2]  <b>MSK</b> [1]<sup>SE</sup>: bone fracture  <b>RES</b> [2]<sup>SE</sup>: cold [2]</p> <p><b>Topical/Bath</b> [3UR] (decoction)  <b>GID</b> [3]<sup>SE</sup>: cholera, diarrhea, food poisoning</p> <p><b>Ritual/Other</b> [1UR] (incense/smoke)  <b>APT</b> [1]: evil eye [1]<sup>SE</sup></p> <p><b>Other/Ritual</b>  <b>APT</b> [2]<sup>SE</sup>: evil eye, protective</p>

				Aerial parts [10UR]	<b>Topical/Steam bath</b> [8UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [7UR] <sup>SE</sup> : bone and joint pain [4], rheumatism [2], vasodilating <b>SKN</b> [1] <sup>SE</sup> : skin care [1]  <b>Ritual/Smoke</b> [1UR] (ritual/smoke) <b>APT</b> [1] <sup>SE</sup>  <b>Topical/Bath</b> [1UR]: (decoction) <b>WGS</b> [1] <sup>NW</sup> : female genitourinary infection  <b>Other/ritual</b> [1UR] <b>APT</b> [2] <sup>SE</sup> : [1]all parts]. , protective [1: fruits]
				Leaves [4UR]	<b>Oral</b> [1]: (infusion (hot)) <b>GID</b> [1] <sup>SE</sup> : gastric pain [1]  <b>Topical</b> [2UR] (grinding/crushing/pulverization, plaster) <b>WGS</b> [1] <sup>SE</sup> : menstruation [1] <b>SKN</b> [1] <sup>SE</sup> : wounds  <b>Vaginal/Uterine</b> [1UR] (vaginal ovule) <b>PRC</b> [1] <sup>SE</sup> : induced abortion [1]
<b>Oleaceae</b>					
<i>Olea europaea</i> L. [9UR] <sup>NW&amp;SE</sup>	<i>Zeytun, zeytun-e Xorāki</i>	( <i>Ziytūn</i> ) <sup>Kur&amp;Sor</sup>	<i>Zeytun</i>	Fruit [9UR]	<b>Topical</b> [8UR] (grinding/crushing/pulverization, plaster, poultice and related preparations) <b>MSK</b> [7]: contusion [1] <sup>SE</sup> , joint dislocation [1] <sup>NW</sup> [1] <sup>SE</sup> , tendinitis [1] <sup>SE</sup> , waist disk [1] <sup>NW</sup> , vasodilating [2] <sup>NW</sup> <b>PRC</b> [1] <sup>NW</sup> : female infertility  <b>Ritually</b> [1UR] (others) <b>APT</b> [1] <sup>SE</sup> : Protective against Jinn, black magic, evil eye  <b>Oral</b> [1UR] (grinding/crushing/pulverization) <b>MSK</b> [1] <sup>SE</sup> : osteoporosis
<i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall.& G.Don) Cif. [28UR] <sup>SE</sup>	<i>Zetun-e Barg Niši, Zetun-e Zangi</i>		<i>Hat</i>	Leaves [26UR]	<b>Oral</b> [23UR] (hot infusion (hot)) <b>MSK</b> [14]: bone and joint pain [6], foot pain [6], joint effusion, rheumatism <b>DIA</b> [3]: diabetes [3] <b>RES</b> [3]: COVID-19, cough [2] <b>CRD</b> [2]: hyperlipidemia, cardiovascular disease <b>GID</b> [1]: gastric pain <b>GNR</b> [1]: infection

					<b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>PAE</b> [1]: baby grinding/crushing/pulverization
				Fruit [2UR]	<b>Oral</b> [2UR] (raw) <b>GID</b> [2]: diarrhea, flatulence
<b>Papaveraceae</b>					
<i>Papaver bracteatum</i> Lindl. [13UR] <sup>NW</sup>	<i>Xašxāš-e Tanaz, Xašxāš-e kabir</i>	<i>(Xašxaşok)<sup>Kur</sup>, (Xaş xaş)<sup>Sor</sup></i>		Flower or Inflorescence [5UR]	<b>Oral</b> [6UR] (decoction, infusion (hot)) <b>URO</b> [2]: kidney infection, bladder infection <b>BLD</b> [1]: anemia <b>HEA</b> [1]: nervous reinforcement, <b>RES</b> [1]: cough <b>GID</b> [1]: gastric pain [1: fruit]
				Seeds [6UR]	<b>Oral</b> [6UR] (raw, Infusion (hot), grinding/crushing/pulverization) <b>HEA</b> [2]: nervous reinforcement [2] <b>MSK</b> [2]: arthritis, bone and joint pain [1: latex] <b>CRD</b> [1]: cardiovascular problems <b>RES</b> [1]: cough  <b>inhalation/smoke</b> [1UR] (incense/smoke) <b>HEA</b> [1]: insomnia
<i>Papaver dubium</i> L. [18UR] <sup>NW</sup>	<i>Xašxāš-e Harz</i>	<i>(Gol sûrak, Bû kala, Şirin Şah tare, Gazga sûrah)<sup>Sor</sup></i>		Flower or Inflorescence [18UR]	<b>Oral</b> [14UR] (infusion (hot)) <b>HEA</b> [6]: nervous reinforcement [2], insomnia [2], clamant/sedative [2; 1: seeds] <b>RES</b> [4]: asthma [2], cough [2] <b>URO</b> [3]: kidney infection [2; 1: aerial parts], urinary tract infection <b>BLD</b> [1]: hematoma cathartic  <b>Topical</b> [2UR] (grinding/crushing/pulverization, decoction + dehydration) <b>SKN</b> [2]: pruritus, skin care [1: aerial parts]  <b>Buccal/Dental/Pharyngeal</b> [1UR] (infusion (hot)) <b>SKN</b> [1]: perioral dermatitis  <b>Topical/Bath</b> [1UR] (infusion (hot)) <b>SKN</b> [1]: perioral dermatitis
<b>Plantaginaceae</b>					
<i>Plantago lanceolata</i> L. [14UR] <sup>NW&amp;SE</sup>	<i>Bārhang-e Sar Neyzei</i>	<i>(Balgavîz)<sup>Kur</sup>, (Gilarikişe)<sup>Sor</sup></i>	<i>Bārhang</i>	Flower or Inflorescence [1UR]	<b>Topical/Steam bath</b> [1UR] (decoction) <b>WGS</b> [1] <sup>NW</sup> : female genitourinary infection
				Leaves [8UR]	<b>Buccal/Dental/Pharyngeal</b> [1UR] (grinding/crushing/pulverization) <b>DEN</b> [1] <sup>NW</sup> : dental infection /caries <b>Topical</b> [3UR] (grinding/crushing/pulverization, plaster) <b>SKN</b> [3] <sup>NW</sup> : scars, lubricant/burn washing

					<p><b>Oral</b> [2UR] (infusion (hot))  <b>GNR</b> [1]<sup>NW</sup>: infection  <b>WGS</b> [1]<sup>NW</sup>: menstruation</p> <p><b>Topical/Bath</b> [2UR] (decoction)  <b>WGS</b> [2]<sup>NW</sup>: female genitourinary infection</p>
				Seeds [5UR]	<p><b>Oral</b> [5UR] (decoction, decoction + dehydration, syrup)  <b>GID</b> [3]<sup>SE</sup>: acid reflux, gastric ulcer, stomachache  <b>RES</b> [2]<sup>SE</sup>: asthma, cold</p>
<i>Plantago major</i> L. [72UR] <sup>NW</sup>	<i>Bārhang</i>	<i>(Havîzar)</i> <sup>Kur</sup> , <i>(Gilarikeşe,</i> <i>Bazarişe,</i> <i>Rikişe,</i> <i>Havîza)</i> <sup>Sor</sup> , <i>(Bal</i> <i>Gavîz)</i> <sup>Kur&amp;Sor</sup>		All parts [1UR]	<p><b>Topical/Bath</b> [1UR] (decoction)  <b>WGS</b> [1]: female genitourinary infection</p>
				Flower or Inflorescence [5UR]	<p><b>Oral</b> [4UR] (decoction, infusion (hot))  <b>GID</b> [1]: stomachache  <b>RES</b> [3]: cough, throat infection</p> <p><b>Topical/Bath</b> [1UR] (decoction)  <b>WGS</b> [1]: female genitourinary infection</p>
				Leaves [55UR]	<p><b>Buccal/Dental/Pharyngal</b> [1UR] (poultice and related preparations)  <b>DEN</b> [1]: dental pain</p> <p><b>Oral</b> [18UR] (decoction, infusion (hot), raw):  <b>GID</b> [2]: stomachache, acid reflux  <b>GNR</b> [3]: infection  <b>HEA</b> [3]: epilepsy, headache, dizzy  <b>PRC</b> [3]: postpartum [3]  <b>RES</b> [1]: cold  <b>URO</b> [1]: kidney pain  <b>WGS</b> [4]: menstruation [2], female genitourinary infection[2]  <b>DEN</b> [1]: dental pain</p> <p><b>Topical</b> [30UR] (grinding/crushing/pulverization, plaster, poultice and related preparations)  <b>PAE</b> [1]: colic  <b>SKN</b> [25]: wounds [7], allergic dermatitis, burns, houshkeh biro (see text), kharkaneh (see text), skin care  <b>WGS</b> [3]: female genitourinary infection, breast cancer  <b>MSK</b> [1]: arthritis</p> <p><b>Topical/Bath</b> [4UR] (decoction)  <b>PRC</b> [1]: female infertility  <b>WGS</b> [3]: female genitourinary infection</p>

					<b>Topical/Steam bath</b> [2UR] (decoction) <b>WGS</b> [2]: female genitourinary infection
				Seeds [11UR]	<b>Oral</b> [11UR] (decoction, hot infusion, syrup) <b>RES</b> [3]: cough, asthma <b>GID</b> [6]: flatulence, gastric ulcer, gastroenteritis, neurogenic gastric disorders <b>SKN</b> [1]: wounds <b>URO</b> [1]: kidney pain
<i>Plantago ovata</i> Forssk. [32UR] <sup>SE</sup>	<i>Bārhang-e</i> <i>Toxmemorqi,</i> <i>Esfarze</i>		<i>Dánychk</i>	Seeds [32UR]	<b>Ophthalmic</b> [2UR] (raw) <b>EYE</b> [2]: ophthalmic cleaner  <b>Oral</b> [29UR] (decoction, grinding/crushing/pulverization, infusion (cold), infusion (hot), infusion in milk, raw) <b>GID</b> [19]: dysentery, gastric ulcer, acid reflux, constipation, diarrhea, stomachache <b>RES</b> [5]: cold, pneumonia, asthma <b>SKN</b> [3]: herpes, skin care, warm temperament in the body <b>GNR</b> [2]: thirst, infection  <b>Topical</b> [1UR] (poultice and related preparations) <b>SKN</b> [1]: burns
<b>Polygonaceae</b>					
<i>Pteropyrum</i> <i>aucheri</i> Jaub.& Spach. [13UR] <sup>SE</sup>	<i>Parand</i>		<i>Patónt</i>	Aerial parts [1UR]	<b>Rectal</b> [1UR] (rectal suppository) <b>WGS</b> [1]: uterine prolapse
				Fruit [4UR]	<b>Oral</b> [3UR] (decoction, decoction + dehydration): <b>GID</b> [3]: diarrhea, vomiting, stomachache  <b>Topical</b> [1UR] (plaster) <b>WGS</b> [1]: uterine prolapse
				Leaves [8UR]	<b>Oral</b> [5UR] (decoction, infusion (hot), grinding/crushing/pulverization) <b>GID</b> [3]: stomachache, gastric colic <b>PAE</b> [2]: hizeh (see text)  <b>Topical</b> [3UR] (grinding/crushing/pulverization): <b>DEN</b> [3]: dental pain, gingivitis
<i>Rheum ribes</i> L. [38UR] <sup>NW&amp;SE</sup>	<i>Rivas</i>	<i>(Rivas)</i> <sup>Sor</sup> , <i>(Rivas)</i> <sup>Kur&amp;Sor</sup>	<i>Pil Góshk</i>	Aerial parts [2UR]	<b>Oral</b> [2UR] (raw) <b>GID</b> [1] <sup>NW</sup> : intestinal parasites <b>GNR</b> [1] <sup>NW</sup> : infection
				Fruit [10UR]	<b>Oral</b> [10UR] (decoction, grinding/crushing/pulverization, infusion (hot)) <b>PAE</b> [2] <sup>SE</sup> : jaundice, scarlatina <b>URO</b> [2] <sup>NW</sup> : dark urine, kidney infection <b>DIA</b> [1] <sup>NW</sup> : reduces blood sugar

					<b>GID</b> [4]: diarrhea [1] <sup>SE</sup> , gastric colic [1] <sup>SE</sup> , gastric ulcer [1] <sup>SE</sup> , steatosis [1] <sup>NW</sup> <b>GNR</b> [1] <sup>SE</sup> : cancer
				Leaves [2UR]	<b>Oral</b> [2UR] (grinding/crushing/pulverization, infusion (hot)) <b>DIA</b> [1] <sup>NW</sup> : reduces blood sugar <b>CRD</b> [1] <sup>NW</sup> : hypertension
				Subterrestrial parts [19UR]	<b>Oral</b> [19UR] (decoction, grinding/crushing/pulverization, infusion (hot), raw) <b>BLD</b> [1] <sup>NW</sup> : anemia <b>CRD</b> [2] <sup>NW</sup> : hyperlipidemia, hypertension <b>DIA</b> [12]: reduces blood sugar [1] <sup>NW</sup> [11] <sup>SE</sup> <b>GID</b> [2]: hepatoprotective [1] <sup>NW</sup> , gastric ulcer [1] <sup>SE</sup> <b>URO</b> [1] <sup>NW</sup> : kidney pain <b>WGS</b> [1] <sup>SE</sup> : menstruation
				Woody parts [5UR]	<b>Oral</b> [5UR] (grinding/crushing/pulverization, infusion (hot)): <b>DIA</b> [2] <sup>NW</sup> : reduces blood sugar <b>GID</b> [3] <sup>NW</sup> : gastric ulcer, constipation, dysentery
<i>Rumex cf pulcher</i> . [3UR] <sup>NW</sup>	<i>Torşak-e Zibā</i>	( <i>Torşuki</i> ) <sup>Kur</sup>			
<i>Rumex crispus</i> L. [5UR] <sup>NW</sup>	<i>Torşak-e Mavāj</i>	( <i>Terşeg</i> , <i>Tereşeka</i> ) <sup>Sor</sup>		Leaves [5UR]	<b>Oral</b> [2UR] (decoction, raw) <b>GNR</b> [1]: infection <b>TNC</b> [1]: nutrient absorption  <b>Topical</b> [3UR] (grinding/crushing/pulverization) <b>SKN</b> [3]: wound
<i>Rumex cyprius</i> Murb. [1UR] <sup>NW</sup>				Flower or Inflorescence [1UR]	<b>Oral</b> [1UR] (infusion (cold)) <b>GID</b> [1]: gastric pain gastric pain
<i>Rumex</i> sp. [7UR] <sup>NW</sup>	<i>Torşak</i>	( <i>Tirişki</i> , <i>Tirişka</i> , <i>Tirişu</i> , <i>Tirişuka</i> ) <sup>Sor</sup>		Leaves [7UR]	<b>Oral</b> [3UR] (infusion (hot), raw) <b>GID</b> [1]: diarrhea <b>WGS</b> [1]: menstruation <b>PAE</b> [1]: flatulence  <b>Topical</b> [4UR] (grinding/crushing/pulverization, poultice and related preparations) <b>PAE</b> [2]: flatulence <b>GID</b> [1]: flatulence <b>GNR</b> [1]: edema
<b>Portulacaceae</b>					
<i>Portulaca oleracea</i> L. [29UR] <sup>NW</sup>	<i>Xorfe</i>	( <i>Pirpire</i> ) <sup>Kur&amp;Sor</sup> , ( <i>Palpine</i> ) <sup>Sor</sup>		Aerial parts [27UR]	<b>Oral</b> [20UR] (decoction, direct thermal alteration, grinding/crushing/pulverization, infusion (hot), raw, raw food formulation) <b>GID</b> [8]: gastric ulcer, constipation [2], diarrhea, appetizer, hemorrhoids, steatosis, stomachache <b>ENV</b> [7]: sunstroke [3], heatstroke [4]

					<p><b>URO</b> [2]: kidney stone, kidney pain  <b>GNR</b> [1]: infection  <b>HEA</b> [1]: headache [1]  <b>TNC</b> [1]: nutrient absorption</p> <p><b>Topical</b> [5UR] (grinding/crushing/pulverization, raw, skin mask/lotion):  <b>ENV</b> [1]: hyperthermia  <b>PAE</b> [4]: colic, flatulence, sunstroke in baby, hyperthermia</p> <p><b>Topical/Bath</b> [1UR] (decoction)  <b>PAE</b> [1]: sunstroke in baby</p> <p><b>Topical/Steam bath</b> [1UR] (decoction)  <b>ENV</b> [1]: hyperthermia</p>
				Leaves [1UR]	<p><b>Oral</b> [1UR] (raw)  <b>PAE</b> [1]: intestinal parasitic infestation</p>
				Seeds [1UR]	<p><b>Oral</b> [1UR] (raw)  <b>PAE</b> [1]: intestinal parasitic infestation</p>
<b>Pteridaceae</b>					
<i>Adiantum capillus-veneris</i> L. [44UR] <sup>NW&amp;SE</sup>	<i>Parsiyāvašān</i>	<i>(Qiytaran, Gía balûki, Rîş piyġambar)</i> <sup>Sor</sup>	<i>Syáh lenggok</i>	Leaves [40UR]	<p><b>Oral</b> [35UR] [infusion (hot), decoction, grinding/crushing/pulverization]  <b>BLD</b> [1]<sup>NW</sup>: anemia  <b>GID</b> [1]<sup>NW</sup>: stomachache [1]  <b>GNR</b> [3]<sup>NW</sup>: infection [3]  <b>HEA</b> [3]<sup>NW</sup>: headache [2], insomnia  <b>RES</b> [20]: asthma [6]<sup>NW</sup> [2]<sup>SE</sup>, cough [5]<sup>NW</sup> [2]<sup>SE</sup>, cold [3]<sup>NW</sup>, pneumonia [1]<sup>NW</sup>, sore throat [1]<sup>NW</sup>  <b>SKN</b> [3]: perioral dermatitis [1]<sup>SE</sup>, warts [2]<sup>NW</sup>  <b>URO</b> [5]: kidney pain [1]<sup>SE</sup>, kidney stone [3]<sup>NW</sup>, dark urine [1]<sup>NW</sup></p> <p><b>Topical</b> [3UR] (grinding/crushing/pulverization, poultice and related preparations)  <b>HEA</b> [1]<sup>NW</sup>: headache  <b>MSK</b> [1]<sup>SE</sup>: bone and joint pain  <b>SKN</b> [1]<sup>NW</sup>: houshke biro (kharkaneh (see text))</p> <p><b>Topical/Steam bath</b> [2UR] (decoction)  <b>HEA</b> [1]<sup>NW</sup>: migraine  <b>RES</b> [1]<sup>NW</sup>: cold</p>
				Aerial parts [3UR]	<p><b>Oral</b> [3UR] [raw, infusion (hot)]  <b>MGS</b> [1]<sup>NW</sup>: prostatitis  <b>SKN</b> [1]<sup>NW</sup>: head fungus [1]  <b>GID</b> [1]<sup>NW</sup>: stomachache [1: flower]</p>

					<b>Topical</b> [1UR] [grinding/crushing/pulverization] <b>PAE</b> [1] <sup>NW</sup> : colic
<b>Ranunculaceae</b>					
<i>Nigella sativa</i> L. [17UR] <sup>NW&amp;SE</sup>	<i>Sīāh Dāneh</i> , <i>Ŝuniz</i>	( <i>Gīa rişē</i> ) <sup>Sor</sup> , ( <i>Sīa dane</i> ) <sup>Kur&amp;Sor</sup>	<i>Syá dáneh</i>	Seeds [17UR]	<b>Ritually</b> [1UR] (others) <b>APT</b> [1] <sup>SE</sup> : protective  <b>Oral</b> [9UR] (grinding/crushing/pulverization, raw) <b>GID</b> [3]: gastric ulcer [2] <sup>NW</sup> , hemorrhoid [1] <sup>SE</sup> <b>PRC</b> [1] <sup>NW</sup> : female infertility <b>WGS</b> [5]: Menstruation [1] <sup>NW</sup> , female hormone imbalance [1] <sup>SE</sup> , ovarian insufficiency [1] <sup>SE</sup> , female genitourinary infection [1] <sup>NW</sup> , uterine infection [1] <sup>NW</sup>  <b>Topical</b> [3UR] (grinding/crushing/pulverization, oil) <b>MSK</b> [1] <sup>SE</sup> : arthritis <b>PRC</b> [1] <sup>NW</sup> : abortion prevention <b>RES</b> [1] <sup>SE</sup> : cold  <b>Buccal/Dental/Pharyngal</b> [1UR] (decoction) <b>SKN</b> [1] <sup>NW</sup> : feet corn  <b>Topical/Smoke</b> [2UR] (incense/smoke) <b>HEA</b> [1] <sup>NW</sup> : nervous reinforcement <b>RES</b> [1] <sup>NW</sup> : cold  <b>Vaginal/Uterine</b> [2UR] (grinding/crushing/pulverization) <b>WGS</b> [2] <sup>NW</sup> : uterine cysts, uterine cancer
<b>Rosaceae</b>					
<i>Crataegus ambigua</i> C.A.Mey. ex A.K.Becker subsp. <i>Ambigua</i> . [2UR] <sup>SE</sup>	<i>Zālzālak-e Xunin</i> , <i>Zālzālak-e Qermez-e Tire</i>		<i>Wezh</i>	Fruit [2UR]	<b>Oral</b> [2UR] (raw) <b>BLD</b> [1]: anemia <b>CRD</b> [1]: cardiovascular disease
<i>Crataegus azarolus</i> var. <i>aronia</i> L. [18UR] <sup>NW</sup>	-	(Goj) <sup>Sor</sup>		Fruit [5UR]	<b>Oral</b> [5UR] (decoction) <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: diabetes <b>GID</b> [2]: gastric ulcer, liver reinforcement <b>RES</b> [1]: cough
				Flower or Inflorescence [3UR]	<b>Oral</b> [3UR] (infusion (hot)) <b>DIA</b> [1]: diabetes

					<b>URO</b> [1]: kidney pain <b>CRD</b> [1]: hypertension
				Leaves [10UR]	<b>Oral</b> [10UR] (decoction, infusion (hot)) <b>CRD</b> [2]: hypertension <b>DIA</b> [2]: diabetes <b>GID</b> [2]: constipation, flatulence <b>GNR</b> [1]: infection <b>URO</b> [3]: kidney pain
<i>Crataegus meyeri</i> Pojark. [25UR] <sup>NW</sup>	<i>Zālzālak-e Armanestāni</i>	(Goīj) <sup>Kur&amp;Sor</sup>		Fruit [7UR]	<b>Oral</b> [7UR] (decoction, raw) <b>GID</b> [2]: gastric ulcer, constipation <b>GNR</b> [3]: infection [3] <b>URO</b> [2]: Kidney pain [2]
				Woody parts [16UR]	<b>Oral</b> [16UR] (decoction, infusion (hot)) <b>CRD</b> [5]: cardiovascular disease [5] <b>GID</b> [3]: gastric ulcer, gastric pain [2] <b>HEA</b> [1]: nervous reinforcement <b>RES</b> [2]: cough, COVID-19 <b>URO</b> [5]: kidney infection, kidney pain, bladder stone, kidney stone [2]
				Leaves [2UR]	<b>Oral</b> [2UR] (decoction) <b>GID</b> [2]: gastric ulcer, gastric pain
<i>Prunus amygdalus</i> Batsch. [9UR] <sup>NW&amp;SE</sup>				Fruit [6UR]	<b>Oral</b> [5UR] (decoction, grinding/crushing/pulverization) <b>HEA</b> [1] <sup>SE</sup> : alzheimer's disease <b>DIA</b> [4] <sup>NW</sup> : reduce blood sugar <b>GID</b> [1] <sup>NW</sup> : gastroenteritis <b>GNR</b> [1] <sup>NW</sup> : weight loss  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>MSK</b> [1] <sup>SE</sup> : contusion  <b>Ritual/Topical</b> [1UR] (oil) <b>APT</b> [1]: protective
<i>Prunus avium</i> (L.) L. [1UR] <sup>NW</sup>			<i>Gilas</i>	Flower or Inflorescence	<b>Oral</b> [1UR] (decoction) <b>URO</b> [1]: kidney stone
<i>Prunus carduchorum</i> (Bornm.) Meikle. [7UR] <sup>NW</sup>	<i>Bādām-e ravanduzi, ĆeQalak</i>	( <i>Badam talx, Ćaqale</i> ) <sup>Sor</sup>		Fruit [5UR]	<b>Oral</b> [5UR] (grinding/crushing/pulverization, decoction) <b>DIA</b> [2]: diabetes <b>GID</b> [2]: steatosis, gastric pain <b>MSK</b> [1]: aching bone)  <b>Topical</b> (grinding/crushing/pulverization) <b>GNR</b> [1]: pains (1: la) <b>SKN</b> [1]: gunshot wound (1; la)

<i>Prunus cerasifera</i> Ehrh. [2UR] <sup>NW</sup>				Fruit	<b>Oral</b> [2UR] (direct thermal alteration (grill, fry, roast, heat, boil, vapor), raw) <b>CRD</b> [2]: hypertension
<i>Prunus eburnea</i> (Spach) Aitch. [10UR] <sup>NW</sup>	<i>Badame Āji,</i> <i>Badame</i> <i>Khakestari</i>		<i>Kharek</i>	Subterrestrial parts [5UR]	<b>Oral</b> [5UR] (decoction, grinding/crushing/pulverization) <b>GID</b> [4]: stomachache [2], gastric ulcer [2] <b>RES</b> [1]: cold
				Fruit [2UR]	<b>Ophthalmic/Smoke</b> [1UR] (incense/smoke) <b>EYE</b> [1]: eye infection  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: wounds
				Aerial parts [1UR]	<b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: pruritus
				Latex/Exudate [2UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>GID</b> [1]: stomachache  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: scalp and hair care
<i>Prunus fenzliana</i> <i>Fritsch</i> [1UR] <sup>NW</sup>	<i>Bādām-e qare</i> <i>Bāqi</i>	( <i>Badam</i> ) <sup>Kur&amp;Sor</sup>	<i>Bādām</i>	Fruit [1UR]	<b>Oral</b> [1UR] (raw) <b>DIA</b> (1): diabetes
<i>Prunus microcarpa</i> C.A.Mey. [29UR] <sup>NW</sup>	<i>Ālbāhuy-e Dāne</i> <i>riz</i>	(Balalok) <sup>Sor</sup>		Fruit [10UR]	<b>Oral</b> [10UR] (decoction, grinding/crushing/pulverization, infusion (hot), raw) <b>DIA</b> [1]: reduces blood sugar <b>URO</b> [2]: kidney stones, Kidney infection <b>GID</b> [4]: constipation [3], gastric ulcer <b>RES</b> [1]: throat Infection <b>URO</b> [1]: kidney infection <b>WGS</b> [1]: uterine prolapse <b>BLD</b> [1]: anemia
				Leaves [5UR]	<b>Oral</b> [5UR] (decoction, infusion (hot)) <b>CRD</b> [1]: cardiovascular problems <b>GID</b> [1]: gastric ulcer <b>RES</b> [1]: throat infection <b>URO</b> [1]: kidney infection <b>WGS</b> [1]: uterine prolapse
				Subterrestrial parts [2UR]	<b>Topical/Bath</b> [2UR] (decoction) <b>WGS</b> [2]: uterine infection, vaginal itching
				Seeds [1UR]	<b>Oral</b> [1UR] (grinding/crushing/pulverization) <b>GID</b> [1]: constipation
				Woody parts [11UR]	<b>Oral</b> [11UR] (decoction, infusion (hot)) <b>CRD</b> [4]: hyperlipidemia [3], hypertension <b>GID</b> [3]: steatosis, gastric ulcer

					<b>HEA</b> [1]: headache <b>URO</b> [3]: kidney infection, kidney pain
<i>Prunus scoparia</i> (Spach) C.K.Schneid. [41UR] <sup>SE</sup>	<i>Bādām-e Kuhi,</i> <i>Aržan</i>		<i>Goátám</i>	Latex/Exudate [16UR]	<b>Ophthalmic</b> [2UR] (grinding/crushing/pulverization) <b>EYE</b> [2]: ophthalmic/ocular cleaner, ophthalmic trauma  <b>Oral</b> [8UR] (decoction, grinding/crushing/pulverization, infusion (cold), infusion (hot)) <b>URO</b> [2]: kidney pain <b>CRD</b> [1]: hypertension <b>DIA</b> [1]: reduces blood sugar <b>RES</b> [1]: pneumonia <b>GID</b> [3]: constipation , stomachache  <b>Topical</b> [6UR] (grinding/crushing/pulverization, plaster, poultice and related preparations) <b>SKN</b> [4]: Scalp and hair care <b>MSK</b> [1]: bone fracture <b>PAE</b> [1]: skull fracture
				Fruit [14UR]	<b>Oral</b> [10UR] (decoction, direct thermal alteration, grinding/crushing/pulverization, raw) <b>DIA</b> [5]: reduces blood sugar <b>HEA</b> [1]: alzheimer’s disease <b>URO</b> [1]: kidney pain <b>GID</b> [1]: gastric ulcer <b>CRD</b> [2]: hyperlipidemia, hypertension  <b>Topical</b> [2UR] (ointment/pomade/oil and fat based preparations, poultice and related preparations) <b>MSK</b> [1]: arthritis <b>SKN</b> [1]: wounds  <b>Topical/Steam bath</b> [2UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [2]: bone and joint pain
				Aerial parts [6UR]	<b>Topical/Steam bath</b> [6UR] (thermic vaporization/aromatic vapor) <b>GNR</b> [1]: pain <b>MSK</b> [4]: bone and joint pain, rheumatism, vasodilating of muscular veins <b>SKN</b> [1]: Skin care
				Leaves [1UR]	<b>Topical/Steam bath</b> [1UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [1]: rheumatism
				Seeds [4UR]	<b>Oral</b> [3UR] (grinding/crushing/pulverization, raw) <b>DIA</b> [2]: reduces blood sugar <b>CRD</b> [1]: hyperlipidemia <b>Topical</b> [1 UR] (Poultice and related preparations) <b>SKN</b> [1]: wounds

<i>Prunus wendelboi</i> (Freitag) Eisenman. [2UR] <sup>SE</sup>	<i>Bādām-e Gen'oi,</i> <i>Arçen</i>		<i>Archen</i>	Latex [2UR]	<b>Oral</b> [2UR] (tablet) <b>GID</b> [1]: gastric ulcer  <b>Topical</b> [1UR] (grinding/crushing/pulverization) <b>SKN</b> [1]: hair loss
<i>Rosa × damascena</i> Herrm. [26UR] <sup>NW&amp;SE</sup>	<i>Go-le</i> <i>Mohammadi,</i> <i>Gol-e goāb</i>	( <i>Goli Baxī</i> ) <sup>Sor</sup>	<i>Gole</i> <i>Mohammadi</i>	Flower or Inflorescence [26UR]	<b>Oral</b> [24UR] (decoction, grinding/crushing/pulverization + formulation , infusion (hot)): <b>GID</b> [10]: constipation [1] <sup>NW</sup> [2] <sup>SE</sup> , diarrhea[1] <sup>SE</sup> , emesis[1] <sup>SE</sup> , stomachache[2] <sup>NW</sup> [1] <sup>SE</sup> , gastric ulcer [1] <sup>NW</sup> , gastroenteritis [1] <sup>NW</sup> <b>PAE</b> [1] <sup>SE</sup> : flatulence <b>PRC</b> [4]: induction of labor [1] <sup>NW</sup> [1] <sup>SE</sup> , postpartum[1] <sup>SE</sup> , induced abortion [1] <sup>NW</sup> <b>RES</b> [3]: asthma [1] <sup>NW</sup> , COVID-19 [1] <sup>SE</sup> , throat infection[1] <sup>NW</sup> <b>CRD</b> [1] <sup>NW</sup> : hyperlipidemia <b>GNR</b> [1] <sup>NW</sup> : infection <b>HEA</b> [2] <sup>NW</sup> : headache [1], migraine <b>URO</b> [2] <sup>SE</sup> : kidney infection, kidney stones  <b>Topical/Bath</b> [1UR] (decoction) <b>WGS</b> [1] <sup>SE</sup> : menstruation  <b>Topical/Steam bath</b> [1UR] (decoction) <b>RES</b> [1] <sup>SE</sup> : cold
<i>Rosa canina</i> L. [65UR] <sup>NW</sup>	<i>Nastaran-e</i> <i>vahši, Gol-e Sag</i>	(Şilandik) <sup>Kur</sup> , (Şilan) <sup>Sor</sup>		All parts [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>CRD</b> [1]: hypertension [1]
				Flower or Inflorescence [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>GNR</b> [1]: infection
				Fruit [62UR]	<b>Oral</b> [62UR] (decoction, decoction + dehydration, infusion (hot)) <b>BLD</b> [3]: anemia, blood regulate/general [2] <b>CRD</b> [5]: hypertension <b>DIA</b> [5]: reduces blood sugar <b>GID</b> [7]: stomachache, gastric ulcer, intestinal parasites <b>GNR</b> [8]: infection [6], pain, pulmonary purification <b>HEA</b> [1]: headache <b>MSK</b> [2]: bone and joint pain , osteoporosis <b>RES</b> [4]: asthma, COVID-19 [2], pneumonia <b>URO</b> [26]: kidney infection, kidney pain [12], kidney stones [12], bladder Infection <b>WGS</b> [1]: female genitourinary infection
				Leaves [1UR]	<b>Topical</b> [1UR] (Poultice and related preparations) <b>SKN</b> [1]: wounds

<i>Rosa foetida</i> Herrm. [15UR] <sup>NW</sup>	<i>Nastaran-e Zard Ros-e Mo'atar</i>	<i>(Voli Zardi)</i> <sup>Sor</sup>		Flower or Inflorescence [13UR]	<b>Oral</b> [13UR] (decoction, decoction + dehydration, infusion (hot)) <b>RES</b> [1]: asthma <b>PRC</b> [1]: female infertility <b>WGS</b> [4]: menstruation [2], female genitourinary infection, uterine infection <b>GID</b> [5]: stomachache <b>GNR</b> [2]: infection
				Leaves [2UR]	<b>Oral</b> [2UR] (decoction + dehydration) <b>WGS</b> [2]: menstruation, uterine infection
<i>Rubus creticus</i> Tourn. ex L. [15UR] <sup>NW</sup>	<i>Tamešk</i>	<i>(Torik)</i> <sup>Sor</sup>		Aerial parts [5UR]	<b>Oral</b> [5UR] (decoction, infusion (hot)) <b>GID</b> [1]: gastroenteritis <b>RES</b> [1]: cough <b>HEA</b> [1]: nervous reinforcement <b>URO</b> [1]: urinary tract infection <b>WGS</b> [1]: ovarian laziness
				Fruit [7UR]	<b>Oral</b> [7UR] (grinding/crushing/pulverization, infusion (hot), raw) <b>GID</b> [2]: stomachache <b>BLD</b> [3]: anemia <b>RES</b> [1]: cold <b>SKN</b> [1]: skin care
				Leaves [2UR]	<b>Oral</b> [1UR] (decoction) <b>GNR</b> [1]: infection  <b>Topical</b> [1UR] (poultice and related preparations) <b>SKN</b> [1]: wounds
				Sub terrestrial parts [1UR]	<b>Topical</b> [1UR] (decoction + dehydration) <b>SKN</b> [1]: burns
<b>Rubiaceae</b>					
<i>Plocama aucheri</i> (Guill.) M.Backlund & Thulin. [9UR] <sup>SE</sup>	<i>kārtus</i>		<i>Tóso, Kartós</i>	Leaves	<b>Oral</b> [8UR] (decoction, infusion (hot), syrup) <b>GID</b> [4]: gastric pain [3], diarrhea <b>PAE</b> [4]: flatulence, colic [2], hizeh (see text)  <b>Topical/Bath</b> [1UR] (decoction) <b>PAE</b> [1]: hizeh (see text)
				<i>Plocama eriantha</i> (Jaub. & Spach) M.Backlund & Thulin. [40UR] <sup>SE</sup>	-

					<p><b>Topical/Bath</b> [1UR] (decoction)  <b>PAE</b> [1]: hizeh (see text)</p>
				Leaves [28UR]	<p><b>Oral</b> [26UR] (decoction, formulation with additives, grinding/crushing/pulverization, grinding/crushing/pulverization + formulation, infusion (hot))  <b>GID</b> [9]: flatulence [2], stomachache [5], constipation [2]  <b>PAE</b> [17]: colic [6], constipation [3], flatulence [2], gastrointestinal motility [2], hizeh (see text) [3], umbilical cord stump healing</p> <p><b>Topical</b> [1UR] (ointment/pomade/oil and fat-based preparations):  <b>MSK</b> [1]: Bone bruised</p> <p><b>Topical/Bath</b> [1UR] (decoction)  <b>PAE</b> [1]: hizeh (see text)</p>
<i>Rubia tinctorum</i> L. [16UR] <sup>SE</sup>	<i>Runas</i>		<i>Rudan</i>	Aerial parts [8UR]	<p><b>Oral</b> [2UR] (decoction, grinding/crushing/pulverization + formulation)  <b>GID</b> [2]: gastroenteritis, gastric ulcer</p> <p><b>Topical</b> [6UR] (grinding/crushing/pulverization, poultice and related preparations, plaster)  <b>SKN</b> [2]: wounds  <b>MSK</b> [4]: bone fractures [3], disk dislocation and hernia</p>
				All parts [3UR]	<p><b>Oral</b> [2UR] (grinding/crushing/pulverization, raw)  <b>MSK</b> [1]: bone and joint pain  <b>PRC</b> [1]: abortion prevention</p> <p><b>Topical</b> [1UR] (poultice and related preparations)  <b>MSK</b> [1]: bone and joint pain</p>
				Latex/Exudate [1UR]	<p><b>Topical</b> [1UR] (plaster)  <b>MSK</b> [1]: bone fracture</p>
				Subterrestrial parts [4UR]	<p><b>Oral</b> [1UR] (decoction)  <b>MSK</b> [1]: bone fracture  <b>Topical</b> [3UR] (poultice and related preparations)  <b>MSK</b> [3]: arthritis, bone fracture, joint dislocation and effusion</p>
<b>Rutaceae</b>					
<i>Haplophyllum canaliculatum</i> Boiss. [83UR] <sup>SE</sup>	<i>Sodābi-ye Tarkei</i>		<i>Sadāf, Sadāp</i>	Flower or Inflorescence [50UR]	<p><b>Oral</b> [32UR] (decoction, decoction (milk), syrup, grinding/crushing/pulverization + formulation, direct thermal alteration (grill, fry, roast, heat, boil, vapor))  <b>GID</b> [3]: diarrhea [2], gastric pain  <b>FEV</b> [1]: fever  <b>GNR</b> [3]: cancer/oncology, infection, pains  <b>MSK</b> [4]: bone and joint pain [2], bone fracture, bone bruised  <b>PAE</b> [4]: infection in baby chest, cold, colic, working gastric infant recently borne  <b>PRC</b> [4]: induced abortion, postpartum [3]  <b>RES</b> [9]: cough [2], lung infection, cold [4], COVID-19 [1], asthma</p>

				<p><b>SKN</b> [1]: perioral dermatitis  <b>WGS</b> [1]: uterine infection nasal (decoction)  <b>PAE</b> [1]: nasal congestion</p> <p><b>Rectal</b> [1UR] (rectal suppository)  <b>PRC</b> [1]: female infertility</p> <p><b>Topical</b> [16UR] (decoction + dehydration, grinding/crushing/pulverization, ointment/pomade/oil and fat based preparations)  <b>GNR</b> [2]: pains [1], chills  <b>HEA</b> [1]: headache  <b>MSK</b> [4]: arthritis, contusion [2], bone fracture  <b>RES</b> [1]: cough  <b>SKN</b> [6]: burns, wounds [5]  <b>WGS</b> [1]: uterine prolapse  <b>FEV</b> [1]: fever</p> <p><b>Topical/Bath</b> [3UR] (decoction)  <b>PAE</b> [3]: cold</p>
			Fruit [24UR]	<p><b>Oral</b> [16UR] (decoction, grinding/crushing/pulverization)  <b>GID</b> [2]: gastric ulcer [2]  <b>PRC</b> [4]: infection in pregnancy, induced abortion, postpartum [2; 1: aerial parts]  <b>URO</b> [1]: Kidney pain  <b>GNR</b> [1]: pain  <b>RES</b> [8]: cold [4; 1: aerial parts], cough [3; 1: aerial parts], COVID-19 [1: aerial parts]</p> <p><b>Topical</b> [3UR] (ointment/pomade/oil and fat based preparations, poultice and related preparations)  <b>SKN</b> [1]: cancer/oncology  <b>WGS</b> [1]: pain in uterine  <b>RES</b> [1]: sinusitis</p> <p><b>Vaginal/Uttering</b> [5UR] (vaginal ovule)  <b>PRC</b> [3]: female infertility, postpartum [2]  <b>WGS</b> [2]: pain in breast, uterine prolapse</p>
			Leaves [7UR]	<p><b>Oral</b> [6UR] (decoction, infusion (hot))  <b>MSK</b> [3]: bone and joint pain [2], bone fracture  <b>PAE</b> [1]: diuretic  <b>PRC</b> [1]: postpartum  <b>RES</b> [1]: cough</p>

					<b>Vaginal/Uttering</b> [1UR] (ointment/pomade/oil and fat-based preparations) <b>WGS</b> [1]: vaginal dryness
<b>Salicaceae</b>					
<i>Salix</i> cf. <i>acmophylla</i> Boiss. [43UR] <sup>NW&amp;SE</sup>	<i>Zardbid</i> <i>Bidmešk</i> ( <i>Bîdmişk</i> ) <sup>Sor</sup>  <i>Zardbid</i> ( <i>Diraxte Bî, Bî</i> ) <sup>Kor</sup> , ( <i>Bî, Bîd</i> ) <sup>Sor</sup> <i>Bid</i>	<i>Deraxti</i> <i>Bî, Bidmešk</i> ( <i>Bîdmişk</i> ) <sup>Sor</sup>  <i>Zardbid</i> ( <i>Diraxte Bî, Bî</i> ) <sup>Kor</sup> , ( <i>Bî, Bîd</i> ) <sup>Sor</sup> <i>Bid</i>	<i>Bid</i> <i>Bidmešk</i> ( <i>Bîdmişk</i> ) <sup>Sor</sup>  <i>Zardbid</i> ( <i>Diraxte Bî, Bî</i> ) <sup>Kor</sup> , ( <i>Bî, Bîd</i> ) <sup>Sor</sup> <i>Bid</i>	Aerial parts [2UR]	<b>Topical/Steam bath</b> [2UR] (thermic vaporization/aromatic vapor) <b>FEV</b> [1] <sup>SE</sup> : fever <b>MSK</b> [1] <sup>SE</sup> : bone and joint pain
				Bark [1UR]	<b>Ritual/Other</b> [1UR] (other/ritual) <b>SKN</b> [1] <sup>NW</sup> : houshkeh biro (see text) (kharkaneh (see text))
				Leaves [36UR]	<b>Oral</b> [10UR] (decoction, infusion (cold), infusion (hot), grinding/crushing/pulverization) <b>BLD</b> [1] <sup>NW</sup> : blood diluting <b>URO</b> [1] <sup>NW</sup> : kidney infection <b>MSK</b> [1] <sup>NW</sup> : arthritis <b>BLD</b> [1] <sup>NW</sup> : anemia <b>GID</b> [1] <sup>NW</sup> : gastric ulcer <b>FEV</b> [1] <sup>NW</sup> : fever <b>GNR</b> [1] <sup>NW</sup> : infection <b>HEA</b> [1] <sup>NW</sup> : headache <b>PAE</b> [1] <sup>SE</sup> : jaundice <b>WGS</b> [1]: uterine cysts  <b>Topical</b> [7UR] (grinding/crushing/pulverization, poultice and related preparations) <b>SKN</b> [7]: warm temperament in the body [2] <sup>SE</sup> , wounds[4] <sup>NW</sup> , pruritus [1] <sup>SE</sup>  <b>Topical/Bath</b> [10UR] (decoction, skin mask/lotion) <b>GNR</b> [1] <sup>SE</sup> : cancer <b>MSK</b> [2] <sup>NW</sup> : arthritis, bone and joint pain <b>PAE</b> [2] <sup>SE</sup> : jaundice, fever <b>RES</b> [1] <sup>SE</sup> : COVID-19 <b>SKN</b> [3]: allergic dermatitis [1] <sup>SE</sup> , body warmth [1] <sup>NW</sup> , pruritus [1] <sup>NW</sup> <b>WGS</b> [1] <sup>NW</sup> : uterine infection  <b>Topical/Steam bath</b> [9UR] (decoction, thermic vaporization/aromatic vapor) <b>MSK</b> [1] <sup>SE</sup> : bone and joint pain <b>PRC</b> [1] <sup>NW</sup> : postpartum <b>BLD</b> [1] <sup>SE</sup> : malaria <b>DIA</b> [1] <sup>SE</sup> : reduces blood sugar <b>MSK</b> [5] <sup>SE</sup> : bone and joint pain [3], rheumatism [2]
				Woody parts [4UR]	<b>Topical</b> [1UR] (skin mask/lotion) <b>SKN</b> [1]: burns  <b>Topical/Steam bath</b> [3UR] (thermic vaporization/aromatic vapor)

					<b>BLD</b> [1]: malaria <b>DIA</b> [1]: reduces blood sugar <b>MSK</b> [1]: rheumatism
<i>Salix aegyptiaca</i> L. [9UR] <sup>NW</sup>	<i>Bidmeshk</i>	( <i>Bîdmeşk</i> ) <sup>Sor</sup>		Flower or Inflorescence [7UR]	<b>Oral</b> [7UR] (infusion (cold), infusion (hot)) <b>CRD</b> [3]: hyperlipidemia, cardiovascular problems [2; 1: leaves] <b>BLD</b> [1]: anemia <b>HEA</b> [4]: headache, nervous reinforcement [2; 1: leaves], dizzy <b>TNT</b> [1]: asthenia
<b>Scrophulariaceae</b>					
<i>Verbascum cheiranthifolium</i> Boiss. [10UR] <sup>NW</sup>	<i>Gol Mahur mavaraye khazari</i>	(Masî Jark) <sup>Kur</sup>		All parts [1UR]	<b>Topical/Bath</b> [1UR] (decoction) <b>DIA</b> [1]: reduces blood sugar
				Leaves [9UR]	<b>Other external</b> [3UR] (raw) <b>DIA</b> [1]: reduces blood sugar <b>SKN</b> [2]: pruritus, skin care  <b>Topical</b> [2UR] (decoction, poultice and related preparations) <b>SKN</b> [1]: reduces hair loss <b>INS</b> [1]: head lice  <b>Topical/Bath</b> [4UR] (decoction) <b>DIA</b> [2]: reduces blood sugar <b>MSK</b> [1]: bone and joint pain <b>SKN</b> [1]: skin care
<i>Verbascum songaricum</i> Schrenk ex Fisch.& C.A.Mey. [1UR] <sup>NW</sup>	<i>Gol-e Māhur-e Torkamanestāni</i> , <i>Gol-e Māhur-e Xorāsāni</i>	( <i>Jar masî, Jarî masî</i> ) <sup>Sor</sup>		Flower or Inflorescence [1UR]	<b>Oral</b> [1UR] (infusion (hot)) <b>GNR</b> [1]: infection
<b>Solanaceae</b>					
<i>Hyoscyamus niger</i> L. [9UR] <sup>NW</sup>	<i>Bazrolbanj</i>	( <i>Qarbang, Qarbangeh, Xarbang</i> ) <sup>Sor</sup>		Seeds [8UR]	<b>Buccal/Dental/Pharyngeal</b> [2UR] (incense/smoke) <b>DNT</b> [1UR]: dental infection <b>INS</b> [1UR]: oral and ophthalmic helminthic infestation  <b>Inhalation/Smoke</b> [2UR] (incense/smoke) <b>DNT</b> [2UR]: dental infection  <b>Topical/Smoke</b> [5UR] (incense/smoke) <b>INS</b> [3]: oral and ophthalmic helminthic infestation [3] <b>SKN</b> [1UR]: skin care <b>EYE</b> [1UR]: allergic conjunctivitis [1: subterrestrial parts]

<i>Hyoscyamus pusillus</i> L. [3UR] <sup>SE</sup>	<i>Bazrolbanj-e kutah, Bazrolbanj-e yek sāle</i>		<i>Dantán shán</i>	Seeds [3UR]	<b>Buccal/Dental/Pharyngeal</b> [3UR] (incense/smoke) <b>DNT</b> [3]: dental pain
<i>Withania coagulans</i> (Stocks) Dunal. [29UR] <sup>SE</sup>	<i>Panir bād, Māye-ye Panir</i>		<i>Panir bād</i>	Aerial parts [6UR]	<b>Topical/Steam bath</b> [6UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [5]: bone and joint pain [2], rheumatism [2], vasodilating in muscles <b>SKN</b> [1]: skin care
				Fruit [20UR]	<b>Oral</b> [16UR] (decoction, grinding/crushing/pulverization + formulation, infusion (hot), infusion (milk), raw) <b>GID</b> [11]: stomachache [5], diarrhea [5], gastric ulcer <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: reduces blood sugar <b>URO</b> [1]: kidney pain <b>WGS</b> [1]: uterine cysts <b>MGS</b> [1]: prostatitis  <b>Topical</b> [3UR] (decoction + dehydration, poultice and related preparations) <b>SKN</b> [1]: skin wounds <b>MGS</b> [1]: prostatitis <b>PRC</b> [1]: post-abortion  <b>Topical/Bath</b> [1UR] (decoction) <b>MSK</b> [1]: rheumatism
				Leaves [3UR]	<b>Topical</b> [3UR] (ointments/pomade/oil and fat-based preparations) <b>BLD</b> [1]: blood diluting <b>SKN</b> [2]: infectious injury, skin wounds
<b>Thymelaeaceae</b>					
<i>Daphne mucronata</i> Royle. [13UR] <sup>NW</sup>	<i>Barge búi Zāgrosi, Kha (a)veshk</i>	<i>(Tīru, Tarbī)</i> <sup>Sor</sup>		Aerial parts [10UR]	<b>Ritually</b> [9UR] (others) <b>SKN</b> [9]: warts  <b>Topical</b> [4UR]: (combustion/ashes) <b>DNT</b> [2]: dental pain [2: bark] <b>HEA</b> [1]: migraine [1: leaves] <b>SKN</b> [1]: allergic dermatitis
<b>Urticaceae</b>					
<i>Urtica dioica</i> L. [75UR] <sup>NW</sup>	<i>Gazane-ye do Paye</i>	<i>(Gazgazok)Kor, (Gaz Gaz, (gazneh, Gaz gazeh, Gazanah, Gazgazk)</i> <sup>Sor</sup>		Aerial parts [8UR]	<b>Oral</b> [6UR] (decoction, infusion (hot)) <b>DIA</b> [1]: reduces blood sugar <b>MSK</b> [1]: arthritis <b>WGS</b> [1]: menstruation <b>GID</b> [1]: gastroenteritis <b>MGS</b> [1]: prostatitis

					<b>RES [1]:</b> cough <b>Topical [1UR] (raw)</b> <b>MSK [1]:</b> bone and joint pain  <b>Topical/Bath [1UR] (decoction)</b> <b>WGS [1]:</b> uterine infection
			All parts [4UR]		<b>Topical [1UR] (poultice and related preparations)</b> <b>GNR [1]:</b> edema  <b>Topical/Bath [2UR] (decoction)</b> <b>PRC [1]:</b> post-abortion <b>WGS [1]:</b> female genitourinary infection  <b>Topical/Steam bath [1UR] (decoction)</b> <b>WGS [1]:</b> female genitourinary infection
			Leaves [62UR]		<b>Oral [54UR] (decoction, infusion (hot))</b> <b>CRD [2]:</b> cardiovascular problems, hypertension <b>DIA [6]:</b> reduces blood sugar [6] <b>GID [7]:</b> gastric ulcer [2], gastroenteritis [3], stomachache [2] <b>GNR [12]:</b> infection [10], pain, weight loss <b>MSK [1]:</b> rheumatism <b>RES [5]:</b> cough [3], cold, throat infection <b>URO [10]:</b> kidney infection, kidney pain [4], kidney purification, urinary incontinence [2], bladder Infection [2] <b>WGS [3]:</b> uterine infection, irregular period, uterine fibroids <b>BLD [1]:</b> blood diluting <b>MGS [2]:</b> prostatitis <b>Topical [4UR] (grinding/crushing/pulverization, poultice and related preparations)</b> <b>HEA [1]:</b> headache <b>MSK [2]:</b> arthritis, rheumatism <b>SKN [1]:</b> scalp and hair care  <b>Topical/Bath [3UR] (decoction)</b> <b>PRC [2]:</b> female infertility <b>WGS [1]:</b> female genitourinary infection  <b>Topical/Steam bath [1UR] (decoction)</b> <b>WGS [1]:</b> female genitourinary infection
			Subterrestrial parts [1UR]		<b>Oral [1UR] (decoction)</b> <b>URO [1]:</b> urinary incontinence
<b>Violaceae</b>					

<i>Viola odorata</i> L. [21UR] <sup>NW</sup>	<i>Banařše-ye Mòatar</i>	( <i>Banařše</i> ) <sup>Sor</sup>		Flower or Inflorescence [21UR]	<b>Oral</b> [21UR] (infusion (hot)) <b>CRD</b> [3]: cardiovascular problems [2], hyperlipidemia <b>GID</b> [2]: food poisoning, stomachache <b>FEV</b> [1]: fever <b>GNR</b> [3]: infections <b>HEA</b> [5]: headache [3], nervous reinforcement [2] <b>RES</b> [7]: asthma [3], cold, cough [2], pneumonia
<b>Zingiberaceae</b>					
<i>Curcuma longa</i> L. [26UR] <sup>SE</sup>	<i>Zardecube</i>		<i>Dár Zard</i>	Subterrestrial parts [26UR]	<b>Oral</b> [12UR] (grinding/crushing/pulverization, decoction, syrup) <b>MSK</b> [3]: bone fracture [2], bone bruised <b>GID</b> [1]: gastric ulcer <b>PRC</b> [6]: abortion prevention, postpartum [4], birth-related injuries <b>RES</b> [1]: COVID-19 <b>SKN</b> [1]: wound  <b>Buccal/Dental/Pharyngal</b> [1UR] (grinding/crushing/pulverization) <b>RES</b> [1]: COVID-19  <b>Topical</b> [13UR] (poultice and related preparations, grinding/crushing/pulverization, ointment/pomade/oil and fat-based preparations, plaster) <b>BLD</b> [1]: blood diluting <b>DNT</b> [1]: dental pain <b>EAR</b> [1]: ear infection <b>GNR</b> [1]: pain <b>MSK</b> [5]: joint dislocation and effusion, contusion, bone fracture [3] <b>SKN</b> [4]: skin care, wounds [3]
<i>Zingiber officinale</i> Roscoe. [14UR] <sup>SE</sup>	<i>Zanjebil</i>		<i>Zanjebil</i>	Subterrestrial parts [14UR]	<b>Oral</b> [12UR] (decoction, grinding/crushing/pulverization, infusion (hot), direct thermal alteration) <b>PRC</b> [6]: induced abortion, postpartum [5] <b>WGS</b> [1]: reduction of menstrual pain <b>RES</b> [5]: cold, COVID-19  <b>Ritual/Bath</b> [1UR] (decoction) <b>APT</b> [1]: protective  <b>Other/Ritual</b> [1UR] (infusion (hot)) <b>APT</b> [1]: protective  <b>Ritual/Oral</b> [1UR] (infusion (hot)) <b>APT</b> [1]: protective
<b>Zygothylaceae</b>					

<i>Tribulus terrestris</i> L. [19UR] <sup>NW</sup>	<i>Xarxasak</i>	<i>(Piykol Konceri)</i> <sup>Sor</sup>		Aerial parts [2UR]	<b>Oral</b> [2UR] (decoction) <b>GNR</b> [2]: infection, pain
				all parts [2UR]	<b>Oral</b> [2UR] (infusion (hot)) <b>GNR</b> [1]: cancer <b>URO</b> [1]: kidney stones
				Fruit [15UR]	<b>Oral</b> [15UR] (decoction, infusion (hot)) <b>CRD</b> [1]: hyperlipidemia <b>DIA</b> [1]: reduces blood sugar <b>URO</b> [13]: kidney infection [2], kidney pain [4], kidney stones [6], bladder Infection
<i>Zygophyllum atriplicoides</i> subsp. <i>eurypterum</i> (Boiss.& Buhse) Popov. [17UR] <sup>SE</sup>	<i>Qiç</i>		<i>Kerich</i>	Aerial parts [1UR]	<b>Topical/Smoke</b> [1UR] (incense/smoke) <b>SKN</b> [1]: fungal infections
				Flowers and Inflorescence [1UR]	<b>Oral</b> [1UR] (decoction) <b>URO</b> [1]: kidney pain
				Leaves [2UR]	<b>Oral</b> [2UR] (decoction) <b>DIA</b> [1]: diabetes <b>GID</b> [1]: stomachache
				Fruit [8UR]	<b>Oral</b> [5UR] (decoction, infusion (cold)) <b>DEN</b> [1]: dental pain <b>DIA</b> [1]: diabetes <b>GID</b> [1]: gastric ulcer <b>MSK</b> [1]: bone& joint pain <b>URO</b> [1]: kidney pain  <b>Topical</b> [3UR] (ointment) <b>GNR</b> [1]: pain <b>MSK</b> [1]: bone fracture <b>SKN</b> [1]: wounds
				Woody parts [5UR]	<b>Buccal/Dental/Pharyngal</b> [3UR] (combustion/ashes) <b>DEN</b> [3]: dental infection, dental pain, teeth whitening  <b>Oral</b> [1UR] (decoction) <b>GID</b> [1]: stomachache  <b>Topical/Steam bath</b> [1UR] (thermic vaporization/aromatic vapor) <b>MSK</b> [1]: rheumatism
<i>Zygophyllum bruguieri</i> (DC.) Christenh.& Byng. [1UR] <sup>NW</sup>			<i>karkavak</i>	Aerial parts [1UR]	<b>Topical/Bath</b> [1UR] (decoction) <b>GNR</b> [1]: food allergies

<i>Zygophyllum fabago</i> L. [10UR] <sup>SE</sup>	<i>Qiç-e lubiāi</i>		<i>Mushnāi</i>	Aerial parts [9UR]	<b>Topical/Bath</b> [5UR] (decoction) <b>INS</b> [1]: bee sting allergy <b>SKN</b> [4]: allergic dermatitis  <b>Topical</b> [4UR] (poultice and related preparations): <b>SKN</b> [2]: allergic dermatitis <b>PRC</b> [1]: postpartum infection <b>HEA</b> [1]: headache
				Latex/Exudate [1UR]	<b>Oral</b> [1UR] (hot infusion) <b>MSK</b> [1]: bone fracture

**Supplementary table 2.** Overview of ailment categories. Ailment descriptions are reported in Persian (Latin transliteration) with the according English translation and explanatory medical terminology in brackets.

<b>Biomedical ailment category (Abbreviation)</b>	<b>Ailment description in Persian</b>	<b>English translation (medical interpretation)</b>
<b>Apotropaic (APT)</b>	Češm Zaxm	Evil eye (Protective)
	Bātelkardan-e Jādu	Counteracting magic (Protective)
	Jenzadegi	Heal someone harmed by jinn (Protective)
<b>Blood (BLD)</b>	Kam Xuni	Anemia
	Saratan-e Xun	Blood cancer
	Raqiq Konande-ye Xun	Blood diluting
	Tasfie-ye Xun	Blood purification
	Tanzim Konande-ye Xun	Blood regulated /general/
	Mālāriā	Malaria
<b>Cardiovascular (CRD)</b>	Safkonande-ye Jaryan-e Xun	Blood path smoothing (Cardiovascular problems)
	Dard-e Qalb	Heart ache (Cardiovascular problems)
	Tapeš-e Qalb	Heart beating (Cardiovascular problems)
	Nārāhati-ye Qalbi	Heart Problem (Cardiovascular problems)
	Gereftegi-ye Rag-e Qalb	Heart artery blockage (Cardiovascular problems)
	Kāheš-e ĉarbi-ye Xun	Reduce blood lipid (Hyperlipidemia)
	Kāheš-e Fešār-e Xun	Reduce blood pressure (Hypertension)
	Ofunāt-e Dandān	Teeth infection (Dental infection, caries)
<b>Dental problems (DNT)</b>	Dandān Dard	
	Dandān-e Puside, Dandān-e Siā-o Surāx	Teeth ache, Worn-out teeth (Dental pain)
	Kerm-e Dandān	Teeth Worm
	Ofunāt-e Lase, Zaxm-e Lase	Gingival Infection (Gingivitis)
	Šostan-e Dahān-o Dandan	Washing Mouth and Teeth ( Oral hygiene)

	Zaxm-e Zabān	Tongue Injury
	Sefidkonande-ye Dandan ( Mesvāk)	Tooth whitening (Teeth brush)
<b>Diabetes (DIA)</b>	Diyābet-e Asabi	Nervous diabetes (Diabetes)
	Kaheš-e Qand-e Xun	Reduce blood sugar (Diabetes)
<b>Digestive (DIG)</b>	Asid-e Me'de	Gastric acid (Acid reflux)
	Suzeš-e Me'de	Gastric burning (Acid reflux)
	Āpāndis	Appendicitis
	Eštehā Āvar	Appetizer
	Sang-e Safrā	Gall bladder stone ( Gallstones)
	Vabā	Cholera
	Yobusat	Constipation
	Eshāl	Diarrhea
	Hazm-e Qazā	Food digestion (Digestive)
	Eshal-e Xuni	Bloody diarrhea (Dysentery)
	Estefrāq	Vomiting
	Bad-e Šekam, Nafx, Varam-e Šekam	Belly wind (Flatulence)
	Varam-e Me'de	Gastric swollen
	Masmumiyat-e Qazāi	Food poisoning
	Delpiçe, Qolanje Me'de , Piç-e Del	Gastric colic (Gastric pain)
	Pori Meade, Darde Me'de Bedalil-e Porxori	Gastric fullness (Gastric pain)
	Del Dard	Stomachache (Gastric pain)
	Sard konand-e Me'de	Having a cold gastric (Gastric pain)
	Garm konand-e Me'de	Having a warm gastric (Gastric pain)
	Zaxm-e Me'de	Gastric injury (Gastric ulcer)
	Ofunat-e Me'de va Rude	Gastric and intestine infection (Gastroenteritis)
	Buy-e Bad-e Dahān	Bad smelling of mouth (Halitosis)
	Bavāsir	Hemorrhoid
	Taqviat-e Kated	Liver Reinforcement (Hepatoprotective)
	Saratān-e Rude	Intestine cancer

	Dard-e Rude	Intestinal pain
	Angal, Kerm-e Del	Parasites (Intestinal parasites)
	Tasfiye-ye Rude	Intestine purification (Laxative)
	Saratān-e Riye	Lung cancer
	Tamizkonande-ye Kated	Cleaning the Liver (Liver purification)
	Tahavo	Nausea
	Me'de Asabi	Nervous gastric (Neurogenic gastric disorders)
	Kated-e ĉarb	Fatty liver (Steatosis)
<b>Ear (EAR)</b>	Dard-e Guš	Ear ache (Ear infection)
	Ofunāt-e Guš	Ear infection
<b>Environmental (ENV)</b>	Āftāb Zadegi	Sunstroke (Heatstroke)
	Garmā Zadegi	Heatstroke (Hyperthermia)
<b>Eye (EYE)</b>	Qermeziy-e ĉešm va Hasāsiyat Bedalil-e Bād, Xāk, va Garde	Eye redness and allergy caused by wind, dust, and pollen (Allergic conjunctivitis)
	Xāreš-e ĉešm	Itching eye
	Ābrizeš-e ĉešm	Exiting water from Eye (Cataract)
	Ofunāt-e ĉešm	Eye infection
	ĉešm Dard	Eye pain
	Tamizkonānde-ye ĉešm az Xāk va kāh	Cleaning eye from dust or chaff (Ophthalmic/ocular cleaner)
	Zaxm-e ĉešm Ba Sangrize ya kāh	Injured eye with tiny stone or chaff (Ophthalmic trauma)
	Taqviāt-e Bināi	Reinforcement of vision (Weak vision)
<b>Fever (FEV)</b>	Tab	Fever
<b>General and Unspecified (GNR)</b>	Zed-e Ofunikonande-ye Havā	Air disinfectant
	Hasāsiyat	Allergic reaction (Allergic reaction/anaphylaxis)
	Afzayeš-e Vazn	Increase weight (Anabolic)
	Tark-e Etiād	Quit drug (Anti-addiction)
	Saratān	Cancer (Oncology)
	Larz	Chills
	Varam-e Badan	Body swelling (Edema)
	Varam-e Dasto Pā	Hand and foot swelling (Edema)

	Darman-e Hasāsiyat-e qazai Be Bāqālā	Treatment food allergies to fava (Food allergies)
	Taqviat-e System-e Imeni	Reinforcement Immune System (Immunostimulant)
	Ofunāt	Infection
	Eltehāb	Inflammation
	Tab-e Mālt	Malt fever
	Dasto Pa Dard Bedalil-e Tark-e Etiād	Pain in hand and foot caused by quitting drug (Opioid-Induced Hyperalgesia)
	Dard	Pain
	Tamizkonande-ye Riye-ye afrād-e Motād	Cleaning addicted person lung (Pulmonary purificant)
	Kāheš-e Tešnegi Dar Ruzedāri	Reduce Thirst over fasting Days (Thirst)
	Kāheš-e ĉarbiy-e Dor-e šekam	Abdominal Fat Reduction (Weight loss)
	Kāheš-e Vazn, Lāqarkonande	Reduce Weight
<b>Goiter (GOI)</b>	Goātr	Goiter
	Kamkāri-ye Tiroid	Reduced Thyroid Function (Hypothyroidism)
<b>Headache, Migraine and Neurological (HEA)</b>	Jologiri az Ālzāymer	Avoiding Alzheimer (Alzheimer's disease)
	Bieštehāi	Not desiring to eat (Anorexia)
	Parišani	Anxiety (Sedative)
	Ārāmbaxš	Calming (Sedative)
	Estres-e Ziād	Having high stress (Sedative)
	Afsordegi	Depression
	Qaškardan	Epilepsy
	Sar Dard	Headache (Headache)
	Sar Dard bedalil-e Sarmā	Headache resulted by coldness (Headache)
	Bixābi	Unbaled to sleep (Insomnia)
	Migren	Migraine
	Ārāmbaxš-e Asāb	Nervous Calming (Nervous reinforcement)
	Taqviyat-e Asāb	Nervous Reinforcement
	Sekte-ye Maqzi	Brain stroke (Stroke)
	Sargije	Dizzy (Vertigo)
<b>Insect and Parasite (INS)</b>	Zanburgazidegi	Bee sting

	Hasāsiyat Bedalil-e Zanburgazidegi	Bee sting allergy
	Niš-e Susk	Beetle bite
	Gush dard Bedalil-e Vorud-e hašare	Earache caused by entering insect inside (Ear insect infestation)
	Niš-e Hašare	Insect bite
	Sorfe, Xareš, Hasāsiyat Bedalil-e Magas-e Sama	Allergic reactions from a fly named samah (Myiasis)
	Kerm Dar Dahān va Damāq	Worm in mouth and nose (Myiasis)
	Sar dard Bedalil-e Kerm Dar çešm	Worm entered in eye caused headache (Oral and ophthalmic helminthic infestation)
	Kerm Dar Dahān	Worm entered in mouth (Oral and ophthalmic helminthic infestation)
	Šepeš-e Sar	Head lice (Pediculosis capitis)
<b>Men genitourinary system disorders (MGS)</b>	Taqviat-e qova-ye Jensi-ye Mard	Men sexual reinforcement (Erectile dysfunction)
	Dard Dar Mardān	Genital pain
	Nāzāi Dar Mardān	Men infertility (Infertility)
	Ofunāt-e Andāme Edrāri-ye Mardān	Men genital infection (Male genital tract infection)
	Prostāt	Prostatitis
<b>Musculoskeletal (MSK)</b>	Ārtroz	Arthritis
	Varam-e Mafāsel	Joint swelling (Arthritis)
	Ārtroz-e Zānu	Knee arthritis (Arthritis)
	Ostoxān Dard	Bone ache (Bone and joint pain)
	Pā Dard	Foot ache (Bone and joint pain)
	Dasto Pā Dard	Hand and foot pain (Bone and joint pain)
	Dard-e Mafāsel	Joints ache (Bone and joint pain)
	Gardandard	Neck pain (Bone and joint pain)
	Pahludard	Rib Pain (Bone and joint pain)
	Kamardard	Waist ache (Bone and joint pain)
	Dasto Pā va Kamar-e Kuftešode Dar Tasādof	Hand, Leg, Waist bruised bone in accident (Bone bruised)
	Zaxme Pahlu va Sine Dar Tasādof	Rib and Chest injured caused by accident (Bone bruised)
	Šekastegi	Fracture (Bone fracture)

	Šekastegi Dar Tasādof	Fracture by accident (Bone fracture)
	Šekastegi-ye Dasto Pa	Hand and leg fracture (Bone fracture)
	Šekastegi-ye Mohre-ye Kamar	Lumbar fracture (Bone fracture)
	Šekastegi-ye Dande, Šekastegi-ye Pahlū	Rib Fracture (Bone fracture)
	Narmkardan-e Ostoxn-e šekaste	Softening fractured bone (Bone fracture)
	Šekastegi-ye kamar	Waist fracture (Bone fracture)
	Darde Sine	Chest Pain
	Kabudi	Bruises (Contusion)
	Kuftegi Dar Tasādof	Contusion caused by accident (Contusion)
	Zarbe šadid Be Badan	High Trauma on body (Contusion)
	Kuftegi-ye Zānu Bā Tasādof	Knee contusion by accident (Contusion)
	Zaxm va Kuftegi ruy-e Pahlū	Rib injury and contusion (Contusion)
	Disk-e Gardan	Neck Disk (Disk dislocation and herniated)
	Dis-e Kamar	Waist Disk (Disk dislocation and herniated)
	Darraftegi-ye Ostoxān	Dislocated Joints (joint dislocation and effusion)
	Varam-e Mafāsel	Joint Swelling (joint dislocation and effusion)
	Puki-ye Ostoxān	Empty Bone (Osteoporosis)
	Romātism	Rheumatism
	Robāt-e Āsibdide-ye Pā	Hurt Ligament (Tendinitis)
	Bāzkonande-ye Raghāy-e Māhiče	Opening Veins of Muscles (Vasodilating)
<b>Pediatric illnesses (PAE)</b>	Pudr-e Bače	Baby Powder
	Tarso Estres Dar Bače, Kudak-e Biqarar	Sedative (Clamant/sedative)
	Sarmāxordegi Dar Bače	Cold
	Deldard-e Nozād	Infant Bellyache (Colic)
	Yobusat-e Bače	Constipation
	Sorfe Dar Bače	Cough
	Bačeī Ke Edrāraš Gerefte Ast	Problem in baby Urine (Diuretic)
	Suzeš-e Edrār Dar Bače	Baby burning urine (Dysuria)
	Tab dar Bače	Fever

Bād-e šekam-e Baçe , Nafx Dar Baçe	Belly wind (Flatulence)	
Deldard-e Nozād	Infant bellyache (Gastric pain)	
Bekar Oftadan-e Me'de Nozād-e Tāze Motevalēdšode	Working gastric infant recently borned (Gastrointestinal motility)	
Garmazadegi Dar Baçe	Heatstroke in baby (Heatstroke)	
Āftābzadegi Dar Baçe	Sunstroke in baby (Heatstroke)	
Zardi	Yellowish (Jaundice)	
Baçei Ke Qazā Nemixorad va Eshāl Ast	Baby who does not eat food and has diarrhea (Infantile anorexia with diarrhea)	
<i>Hizeh</i>	<i>Hizeh</i> (Infantile diarrhea, vomiting, fever)	
Angal Dar Baçe	Parasite in child (Intestinal parasitic infestation)	
Bastešodan-e Damaqe Nozād	Baby nose blocked (Nasal congestion)	
Šab Edrāri Dar Pesear Baçe	Night urine in baby boy (Nocturnal enuresis)	
Seft Šodan-e Ostoxān-e Baçe	Tightening Baby Bone (Osteostimulant)	
Guš Dard-e Baçe	Earache in baby (Otitis)	
Narahati-ye Koliye Dar Baçe	Baby Kidney problem (Pediatric kidney disease)	
Zaxm-e Dahān-e Baçe	Mouth Injury Baby (Perioral dermatitis)	
Ofunat-e Sine Dar Baçe	Infection in baby chest (Pneumonia)	
Nozādi ke Naqes va Bimār Āst	Incomplete and sick infant (Premature birth)	
Sorxak	Scarlet fever (Scarlatina)	
Jologiri Az Ofunat-e Nāf va Badan-e Baçe	Avoid infection on baby Naval and Body (Skin infection)	
Sar-e Šekaste Dar Baçe	Baby fractured head (Skull fracture)	
Nafas-e Kutah va Sari Dar Baçe 2-3 mahe	Short or rapid breathing in a 2-month-old baby (Tachypnea)	
Xošk Šodan-e Naf-e Baçe Bad Az Zayemān	Infant Naval (Umbilical cord stump healing)	
Taskin-e Dard	Pain sedative (Vasodilation)	
Garmi-ye Baçe	Rash on baby skin due to wormy (Warm temperament in the body)	
<b>Venomous Animal Bites (VAB)</b>	Aqrabgazidegi	Scorpion sting
	Mārgazidegi	Snake bite
	Hasāsiyat Be Niše Mār	Allergy to snake bite (Snake venom allergy)

<b>Pregnancy and childbearing (PRC)</b>	Jologiri Az Seqt-e Janin	Fetus abortion avoidance (Abortion prevention)
	Zaxm-e Zayemān	birth-related injuries
	Dard-e Sine Dar Zan-e Zāymānkarde	Breast pain in child birthed women (Breastfeeding)
	Dard-e Sine Dar Mādar-e Širde	Breastfeeding-related breast pain (Breastfeeding)
	Āfyzayeš-e Šire Mādar	Increase Mother milk (Breastfeeding)
	Nāzāi Dar Zanān	Female infertility
	Seqt-e Janin-e Naqes	Induced abortion
	Komak Be Zayemān-e Rāhat	Easy Childbirth (Induction of labor)
	Ofunat Dar Doran-e Hāmelgi	Infection in Pregnancy periods (Infection in pregnancy)
	Ofunat-e Pestān	Infection in Breast (Mastitis)
	Bad Az Zāyemān	After Childbirth (Postpartum)
	Xarej Kardan-e Joft Az Mādar	Placental delivery (Postpartum)
	Bad Az Seqt-e Janin	Post-abortion (Postpartum)
	Behbude Zaxm-e Amal-e Sezarian	Post-hysterectomy injury (Postpartum)
	Dard-e Zāyemān	Postpartum abdominal pain (Postpartum)
	Xarej Kardan-e Ofunat Bad Az Zāyemān	Postpartum infection (Postpartum)
	Jam Kardan-e Rahem Bad Az Zāyemān	Postpartum uterine contractions (Postpartum)
	Dard-e Rahem Bad Az Zāyemān	Postpartum uterine cramps (Postpartum)
	Kaheš-e Xunrizi Bad Az Seqte Janin	Reduce bleeding after fetus abortion
	Šostan-e Rahem Bad Az Zāyemān	Uterine postpartum irrigation (Postpartum)
<b>Respiratory (RES)</b>	Tapeš-e qalbe Zane Bārdār	Heart beating in Pregnant Women (Pregnancy-related palpitations)
	Āsm	Asthma
	Nafastangi	Breath Tighten (Asthma)
	Dard-e Sine Bedalil-e Sarmaxordegi	Chest pain resulted by cold (Cold)
	Sarmaxordegi	Cold
	Ofunat Bedalil-e Sarmaxordegi	Infection caused by cold (Cold)
	Ābrizeše Bini	Runny nose (Cold)

	Sinuzit	Sinusitis (Cold)
	Atse	Sneezing (Cold)
	Sorfe	Cough
	Dard-e Sine Bedalil-e Sorfe	Cough-related chest pain (Cough)
	Xeltāvar	Expectorant
	Koronā	Corona (COVID-19)
	Ofunat-e Riye, Ofunat-e Sine, Riye Baste	Lung infection (Pneumonia)
	Gereftegi-ye Sedā	Captured Voice (Throat)
	Galu Dard	Sore throat (Throat)
	Ofunat-e Galu	Throat Infection (Throat)
	Loze	Tonsil (Throat)
<b>Skin (SKN)</b>	Tāval ruy-e Pust Bedalil-e Hasāsiyat	Allergic contact blister (Allergic dermatitis)
	Hasāsiyat-e Pusti (Xareš, Sorxi, Juš)	Skin Sensitivity (itching, redness, rash) (Allergic dermatitis)
	Kahir	Urticarial
	Abele Ruy-e Dast	Warts
	Tāval Bedalil-e Suxtegi	Blister caused by burned (Burns)
	Suxtegi	Burns
	Qodad-e Saratani Ruye Šane	Cancer gland on shoulder (Cancer/oncology)
	Saratan-e Pust	Skin cancer (Cancer/oncology)
	Hazf-e Jaye Suxtegi-ye Pusti, Čaqu, Zaxm, Jay-e Baxiye)	Scars (injury, burns, knife, stich)
	Hoške biro, Xarkane	<i>Houshkeh biro, Kharkaneh (dermatological complications)</i>
	Ofunat-e Qarçi (Pā, Pust)	(Fungal infection (feet, skin) (Fungal infection)
	<i>Gedrun</i>	<i>Gedrun (fungal skin infection)</i>
	Bavāsir	Hemorrhoid
	Tabxāl	Herpes (Perioral dermatitis)
	Zaxm-e Dahān, Zaxm va Suzeš-e Atrāf-e Dahān	Injury and burning around mouth (Perioral dermatitis)
Zaxm-e Dahān Bedali-e Garmi	Injury around mouth caused by excess of inner warmth (Perioral dermatitis)	

Tab-e Barfaki, Dahān-e Zaxm	Snowy fever around mouth (Perioral dermatitis)
Xareš-e Badan	Body itching (Pruritus)
Xareš-e Sar	Head Itching (Pruritus)
Xareš-e kaf-e Pā	Itching feet bottom (Pruritus)
Gel-e Mu	Hair gel (Scalp and hair care)
Taqviat konande-ye Rošd-e Mu	Hair growth reinforcement (Scalp and hair care)
Qarĉe Sar	Head fungus (Scalp and hair care)
Sari Ke Puste Xošk Dārad	Head with Dry skin (Scalp and hair care)
Kaheš-e Rizeš-e Mu	Reduce Hair loss (Scalp and hair care)
Hazf-e Muy-e Zāed	Remove redundant hair (Scalp and hair care)
Šampu	Shampoo (Scalp and hair care)
Dast-o Pay-e Xošk	Dry hand and foot (Skin care)
Šafaf Konande-ye Pust, Saf Konande-ye poost	Face lightening (Skin care)
Juše Surat	Face pimple (Skin care)
Lake Bare Pust	Face spot removal (Skin care)
Qode-ye Čarbi-ye Gardan	Fat gland on neck (Skin care)
Mixĉe-ye Pā	Feet Corn (Skin care)
Tarak-e Pā, Garmi-ye Pā	Feet cracked, Feet warm (Skin care)
Buy-e Bade Pā	Foot bad smelling (Skin care)
Tarak-e Dasto Pā	Hand and Foot crack (Skin care)
Juše Čerki Ruy-e Pust	Infectious pimple on skin (Skin care)
Dard Bedalil-e Dasto Pa-ye Xošk	Pain caused by dry hands and feet (Skin care)
Zigil	<i>Balukeh</i> (Warts)
Garmi-ye Badan ( Sard Kardan-e badan-e Kasi Ke Garmi Dārad)	Body warmth in the body (cooling the body) (Body warmth)
Zaxm-e Bastar	Bedsore (Wound)
Tāval Ruy-e Zaxm	Blister on injury (Wound)
Xarej Karda-e Tir Az Badan	Bullet extraction (Wound)
Laxte Šodan-e Zaxm	Coagulating injury (Wound)
Zaxm-e Amiq	Deep injury (Wound)

	Zaxm-e Pay-e Diabeti	Diabetic foot injury (Wound)
	Zaxme Diabeti	Diabetic injury (Wound)
	Zedd-e Ofuni Konande-ye Zaxm	Disinfectant of injury (Wound)
	Ofunat-e Zam-e Suxtegi	Infection in burned skin injury (Wound)
	Ofunat-e Baxiye-ye Jarāhi	Infection in surgical stitch (Wound)
	Ofunat Dar Jay-e Xar-e Ruy-e Pust	Infection in thorn entered parts on skin (Wound)
	Qodad-e Ofuni Ruy-e Pust (Pust, Gardan, Dasto Pā)	Infectious gland on skin (skin, feet, neck, hand and feet) (Wound)
	Qodad-e Ruy-e Galu	Infectious gland on throat (Wound)
	Zaxm-e Ofuni	Infectious injury (Wound)
	Eltehāb Dar Zaxm	Inflammation in injury (Wound)
	Šostešuy-e Zaxm-e Suxtegi	lubricant/burn washing (Wound)
	Xarej Kardan-e Suzan Az Pust	Extracting a Needle from the Skin (Wound)
	Zaxm-e Pusti (Boridegi-ye Dast, Angošthā, Zaxm-e Tir)	Skin wounds (Injured hand, Fingers, Bullet injury) (Wound)
<b>Tonica (TNC)</b>	Afzāyeš-e Enerži	Increase energy (Asthenia)
	Moqavi	Nutritious (Nutrient absorption)
<b>Urological (URO)</b>	Edrār-e Tire	Dark urine (caused by kidney infection, sucked urine) (Dark urine)
	Ofunat-e Koliye	Kidney infection (Kidney)
	Koliye Dard	Kidney pain (Kidney)
	Tasfiye-ye Koliye	Kidney purification (Kidney)
	Sang-e Koliye	Kidney stone (Kidney)
	Kasi ke Tavān-e control-e Edrār Nadārad, Edrār-e qatre qatre	Urinary incontinence
	Ofunat-e Masāne	Bladder Infection (Urinary tract infection)
	Takaror-e Edrār	Repeated urine (Urinary tract infection)
	Ofunat-e Edrāri	Urinary infection (Urinary tract infection)
	Suzeš-e Edrāri	Urine burning (Urinary tract infection)
	Sang-e Masāne	Bladder stone (Vesical calculi)
<b>Women genitourinary system disorder (WGS)</b>	Saratān-e Sine	Breast cancer (Breast problems)
	Kist-e Sine	Breast cyst (Breast problems)
	Dard-e Pestān	Pain in Breast (Breast problems)

Moškelat-e hormoni Dar Zanān	Hormonal problems in women (Female hormone imbalance)
Qāede Āvar	Causes menstruation (Menstruation)
Qāedegi-ye Nāmonazam	Irregular period (Menstruation)
Āramkardan-e Dard-e Period, Dard-e Māhāneh, Deldard-e Zanān, Kāheš-e Dard-e Ādat-e Māhāne	Reduce menstrual pain, Monthly pain, Women bellyache, Reduce Monthly habit pain (Menstruation)
Kāheš-e Xunrizi-ye Zanān	Reduce women bleeding (Menstruation)
Ābrizeš az Vāžan	Exiting water from Vagina (Pelvic problems)
Ofunat-e Zanān-e, Ofunat-e Toxmdān	Female genitourinary infection (Pelvic problems)
Dard-e Rahem	Female genitourinary pain (uterine) (Pelvic problems)
Zaxm-e Toxmdān	Ovarian injury (Pelvic problems)
Kist-e Toxmdān	Ovarian cysts (Pelvic problems)
Tanbali-ye Toxmdān	Ovarian laziness (Pelvic problems)
Dard-e Rahem	Pain in Uterine (Pelvic problems)
Rahem-e Časbande	Sticky uterine (Pelvic problems)
Saratān-e Rahem	Uterine cancer (Pelvic problems)
Kist-e Rahemi	Uterine cysts (Pelvic problems)
Oftadegi-ye Rahem	Uterine dropped (Pelvic problems)
Fibroid-e Rahem	Uterine fibroids (Pelvic problems)
Ofunat-e Rahem	Uterine infection (Pelvic problems)
Tanbali-ye Rahem	Uterine laziness (Pelvic problems)
Darman-e Rahem-e Parešode	Uterine rupture (Pelvic problems)
Bād-e Rahem	Uterine wind (Pelvic problems)
Buy-e Bade Vāžan	Vaginal bad smelling (Pelvic problems)
Xoški-ye Vāžan	Vaginal dryness (Pelvic problems)
Ofunat-e qarĉi Dar Zanān, Ofunat-e Vāžan	Vaginal fungus infection (Pelvic problems)
Xareš-e Vāžan	Vaginal itching (Pelvic problems)

## Declaration of Competing Interest

Authors declare no conflicts of interest.

## CRedit Author Statement

TM: Investigation, data curation, formal analysis, writing original draft; MDC: Data curation, formal analysis; ML and CSW: Conceptualization, writing, review and editing. AS: Resources (facilitating field research).

## Funding

This study was supported by the Swiss Government Excellence Scholarships (Personal ESKAS-Nr: 2020.0527), the UZH Candoc grant (Nr: FK-23-104), the Georges und Antoine Claraz Schenkung, and the Stiftung für Komplementärmedizin, Zürich.

## Acknowledgments

We express our deep gratitude to all the indigenous people, especially those who were interviewed, for sharing their invaluable knowledge. Their contributions made this research possible. Special thanks to Sardar Vali Mohammad Kurd, head of the Kurdish tribe in Baluchestan, Iran, for welcoming the first author into his home and facilitating trust and rapport with the indigenous community, which greatly eased the fieldwork.

We also thank PD Dr. Reto Nyffeler for his valuable input on the project, and Dr. Alex Rudov for his comprehensive support, also with plant identification, Mr. Ebrahimi, head of the Conservation Organization of the Environment in Sardasht, and Mr. Aghai, Mr. Mohammad Nezhad, and Mr. Khezhnezhad for their assistance in the villages. Additionally, we thank Dr. Heydari at the Agricultural and Natural Resources Research Center of West Azerbaijan for her support during the fieldwork.

## References

Abu-Asab, M.S., 2020. Avicenna's single drugs. Avicenna Pharmaceutical Press, Washington, DC.

Ahmad Kiadaliri, A., Najafi, B., Haghparast-Bidgoli, H., 2011. Geographic distribution of need and access to health care in rural population: an ecological study in Iran. *Int. J. Equity. Health.* 10, 39. <https://doi.org/10.1186/1475-9276-10-39>.

Ahmed, H.M., 2017. Traditional uses of Kurdish medicinal plant *Pistacia atlantica* subsp. *kurdica* Zohary in Ranya, Southern Kurdistan. *Genet. Resour. Crop. Evol.* 64, 1473–1484. <https://doi.org/10.1007/s10722-017-0522-4>.

Ahmed, Z.B., Yousfi, M., Viaene, J., Dejaegher, B., Demeyer, K., Vander Heyden, Y., 2021. Four *Pistacia atlantica* subspecies (*atlantica*, *cabulica*, *kurdica* and *mutica*): A review of their

botany, ethnobotany, phytochemistry and pharmacology. *J. Ethnopharmacol.* 256, 113329. <https://doi.org/10.1016/j.jep.2020.113329>.

Asatrian, G., 2009. Prolegomena to the study of the Kurds. *Iran and the Caucasus.* 13, 1–58. <http://doi.org/10.1163/160984909X12476379007846>.

Asgarpanah, J., 2021. A review on the essential oil chemical profile of *Salvia* genus from Iran. *Nat. Volatiles & Essent. Oils.* 83, 1–28. <https://doi.org/10.37929/nveo.852794>.

Askarian, M., Mansour Ghanaie, R., Karimi, A., Habibzadeh, F., 2012. Infectious diseases in Iran: a bird's eye view. *CMI.* 18, 1081–1088.

Assadi, M., Massoumi, A.A., Khatamsaz, M., Mozaffarian, V., 1992–2018. *Flora of Iran.* Vol. 1–149, Research Institute of Forest Publication, Tehran. (in Persian)

Azizi, H., Keshavarzi, M., 2015. Ethnobotanical study of medicinal plants of Sardasht, Western Azerbaijan, Iran. *J. Herb Drugs.* 6, 113–119.

Bernard, H.R., 2011. *Research methods in anthropology: Qualitative and quantitative approaches*, fifth ed. Alta Mira Press, Lanham.

Bestor, J.F. 1979. *The Kurds of Iranian Baluchistan: A regional elite.* Dissertation. MacGill University, Montreal.

Bocheńska, J., 2018. *Rediscovering Kurdistan's cultures and identities.* Palgrave Studies in Cultural Heritage and Conflict, London.

Boven, K.V., Huib, T.N., 2022. *ICPC-3 International Classification of Primary Care User Manual and Classification.* CRC Press, Boca Raton.

Boyajian, V., Shahbakhsh, A., 2015. Remarks on the identity and language situation in Sangan. *Iran and the Caucasus.* 193, 265–68. <http://doi.org/10.1163/1573384x-20150303>.

Boyajian-Surenians, V., 2007. A Baluchi episode from the Hoseyn-kord-e Shabestari cycle. *Iran and the Caucasus.* 112, 249–254.

Bye, R., Linares, E., Estrada, E., 1995. Biological diversity of medicinal plants in Mexico. In: Arnason, J.T., Mata, R., Romeo, J.T. (Eds.), *Phytochemistry of medicinal plants.* Plenum Press., New York, pp. 65–82.

Crosby, A., 2003. *The Columbian exchange. Biological and cultural consequences of 1492. 30th Anniversary Edition.* Praeger, London.

Davis, P.H., 1965–1988. *Flora of Turkey and the East Aegean Islands, vols 1–10.* Edinburgh University Press, Edinburgh.

Djamali, M., Akhiani, H., Khoshravesh, R., Andrieu-Ponel, V., Ponel, P., Brever, S., 2011. Application of the Global Bioclimatic Classification to Iran: Implications for understanding the modern vegetation and biogeography. *Ecol. Mediterr.* 371, 91–114.  
<http://doi.org/10.3406/ecmed.2011.1350>.

Ebrahimnejad, H., 2004. *Medicine, public health and the Qājār state: Patterns of medical modernization in nineteenth-century Iran.* Brill, Leiden.

Etkin, N., 2006. *Edible medicines. An ethnopharmacology of food.* The University of Arizona Press, Tucson.

Farhadi, Z., Alidoost, S., Behzadifar, M., Mohammadibakhsh, R., Khodadadi, N., Sepehrian, R., Sohrabi, R., Taheri Mirghaed, M., Salemi, M., Ravaghi, H., Behzadifar, M., 2016. The prevalence of migraine in Iran: A systematic review and meta-analysis. *IRCMJ.* 18, e40061.  
<http://doi: 10.5812/ircmj.40061>.

Farzanfar, A., 1992. *Ethnic groups and the state: Azaris, Kurds and Baluch of Iran.* Institute of Technology, Massachusetts.

Flattery, D.S., Schwartz, M., 1989. *Haoma and Harmaline. The botanical identity of the Indo-Iranian sacred hallucinogen “Soma” and its legacy in religion, language, and Middle Eastern folklore.* University of California Press, Berkley, CA.

Foster, G., Anderson, B., 1978. *Medical Anthropology.* Alfred A. Knopf, New York.

GBD 2019 Iran Collaborators, 2022. Health system performance in Iran: A systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 399, 1625–1645.  
<https://doi.org/10.1016/S0140-67362102751-3>.

Geck, M.S., Reyes García, A.J., Casu, L., Leonti, M., 2016. Acculturation and ethnomedicine: A regional comparison of medicinal plant knowledge among the Zoque of southern Mexico. *J Ethnopharmacol.* 187, 146–159. <https://doi.org/10.1016/j.jep.2016.04.036>.

Ghahremaninejad, F., Nejad Falatoury, A., 2016. An update on the flora of Iran: Iranian angiosperm orders and families in accordance with APG IV. *Nbr.* 21, 80–107.

Ghasemi Pirbalouti, A., Momeni, M., Bahmani, M., 2013. Ethnobotanical study of medicinal plants used by Kurd tribe in Dehloran district, Ilam Province. *Afr. J. Tradit. Complement. Altern. Med.* 10, 368–385. <http://doi.org/10.4314/ajtcam.v10i2.24>.

Goodman, S.M., Ghafoor A., 1992. *The Ethnobotany of Southern Balochistan, Pakistan, with Particular Reference to Medicinal Plants.* Field Museum of Natural History, Chicago.

Gunter, M.M., 2020. Iran's forgotten Kurds. *J. South Asian Middle East. Stud.* 432, 54–67. <https://doi.org/10.1353/jsa.2020.0009>.

Hosseini, S.H., Sadeghi, Z., Hosseini, S.V., Bussmann, R.W., 2022. Ethnopharmacological study of medicinal plants in Sarvabad, Kurdistan province, Iran. *J. Ethnopharmacol.* 288, 114985. <https://doi.org/10.1016/j.jep.2022.114985>.

Huyse, P., 1990. Die persische Medizin auf der Grundlage von Herodots Historien. *Ancient Society.* 21, 141–48.

Irannejad, S., 2023. The history of medicinal plants in traditional Persian medicine. In: *Therapeutic medicinal plants in traditional Persian medicine.* CRC Press, pp. 6–12.

Jafarirad, S., Rasoulpour, I., 2019. Pharmaceutical ethnobotany in the Mahabad West Azerbaijan biosphere reserve: ethno-pharmaceutical formulations, nutraceutical uses and quantitative aspects. *Braz. J. Pharm. Sci.* 55, e18133. <http://doi.org/10.1590/s2175-97902019000118133>.

Jahani, C., 2014. The Baloch as an ethnic group in the Persian Gulf region. In: *The Persian Gulf in modern times: People, ports, and history.* Palgrave Macmillan, New York, pp. 267–297.

Jahani, C., 2019. *Grammar of modern standard Balochi.* Acta Universitatis Upsaliensis, Uppsala.

Khazaei, S., Mohammadian Hafshejani, A., Saatchi, M., Salehiniya, H., Nematollahi, S., 2015. Epidemiological aspects of Cutaneous Leishmaniasis in Iran. *Arch. Clin. Infect. Dis.* 103, e28511. <https://doi.org/10.5812/archcid.28511>.

Langenheim, J.H., 2003. Plant resins: chemistry, evolution, ecology, and ethnobotany. Timber Press, Portland.

Leonti, M., Verpoorte, R., 2017. Traditional Mediterranean and European herbal medicines. *J Ethnopharmacol.* 199, 161–167. <https://doi.org/10.1016/j.jep.2017.01.052>.

Leonti, M., Weckerle, C., 2015. Quantitative and comparative methods in ethnopharmacology. In: Heinrich, M., Jäger, A.K. (Eds.), *Ethnopharmacology*. John Wiley and Sons Ltd, Chichester, pp. 20–40. <https://doi.org/10.1002/9781118930717>.

Mahboubi, M., Heidarytabar, R., Mahdizadeh, E., Hosseini, H., 2017. Antimicrobial activity and chemical composition of *Thymus* species and *Zataria multiflora* essential oils. *Agric. Nat. Resour.* 515, 395–401. <https://doi.org/10.1016/j.anres.2018.02.001>.

Mahendra, P., Bisht, S., 2012. *Ferula asafoetida*: Traditional uses and pharmacological activity. *Pharmacogn. Rev.* 612, 141–6. <https://doi.org/10.4103/0973-7847.99948>.

Maleki, T., Akhiani, H., 2018. Ethnobotanical and ethnomedicinal studies in Baluchi tribes: a case study in Mt. Taftan, southeastern Iran. *J. Ethnopharmacol.* 217, 163–177. <https://doi.org/10.1016/j.jep.2018.02.017>.

Mann, R.D., 1984. *Modern drug use: An enquiry on historical principles*. MTP Press Limited, Lancaster UK.

Martin, G.J., 2004. *Ethnobotany: a methods manual*. Chapman and Hall, Paris.

Mehrnia, M., Akaberi, M., Amiri, M.S., Nadaf, M., Emami, S.A., 2021. Ethnopharmacological studies of medicinal plants in central Zagros, Lorestan Province, Iran. *J. Ethnopharmacol.* 280, 114080. <https://doi.org/10.1016/j.jep.2021.114080>.

Metanat, M., Sharifi-Mood, B., Alavi-Naini, R., Aminianfar, M., 2012. The epidemiology of tuberculosis in recent years: Reviewing the status in south-eastern Iran. *Zahedan. J. Res. Med. Sci.* 13, e93704. (Persian)

Miraldi, E., Ferri, S., Mostaghimi, V., 2001. Botanical drugs and preparations in the traditional medicine of West Azerbaijan Iran. *J. Ethnopharmacol.* 75, 77–87. [https://doi.org/10.1016/s0378-8741\(00\)00381-0](https://doi.org/10.1016/s0378-8741(00)00381-0).

- Moradi, R., Olyaeemanesh, A., Mosadeghrad, A.M., Harirchi, I., Larijani, B., 2023. Measuring equity of geographical distribution of specialist physicians in Iran's health system. *Int J Prev Med.* 14, 60. [https://doi.org/10.4103/ijpvm.ijpvm\\_542\\_21](https://doi.org/10.4103/ijpvm.ijpvm_542_21).
- Mozaffarian, V.A., 2010. Dictionary of Iranian plant names: Latin, English, Persian. Farhang-i Mu'asir. Tehran.
- Nasir, E., Ali, S.I., 1970–2003. Flora of Pakistan. National Herbarium, NARC, Islamabad, Department of Botany, University of Karachi, Karachi.
- Nasiri, Z., Kalantari, M., Mohammadi, J., Daliri, S., Mehrabani, D., Azizi, K., 2022. Cutaneous Leishmaniasis in Iran: A review of epidemiological aspects, with emphasis on molecular findings. *Parasite.* 29, 47. <https://doi.org/10.1051/parasite/2022047>.
- Nayernouri, T., 2015. A brief history of ancient Iranian medicine. *Arch. Iran Med.* 188, 549–551.
- Noroozi, J., Talebi, A., Doostmohammadi, M., Bagheri, A., 2020. The Zagros Mountain Range. In: Noroozi, J. (Eds.), Plant biogeography and vegetation of high mountains of Central and South-West Asia. *Plant and Vegetation*, 17, 185–214. [https://doi.org/10.1007/978-3-030-45212-4\\_6](https://doi.org/10.1007/978-3-030-45212-4_6).
- Norouzinejad, F., Ghaffari, F., Raeisi, A., Norouzinejad, A., 2016. Epidemiological status of malaria in Iran. 2011–2014. *Asian Pac. J. Trop. Med.* 911, 1055–1061. <https://doi.org/10.1016/j.apjtm.2016.09.007>.
- Perry, J.R., 1975. Forced migration in Iran during the seventeenth and eighteenth centuries. *Iranian Studies.* 84, 199–215.
- Pieroni, A., Vandebroek, I. (Eds.), 2009. *Traveling cultures and plants: The ethnobiology and ethnopharmacy of human migrations*, 1st ed. Berghahn Books.
- Pilehvar, A., 2021. Spatial-geographical analysis of urbanization in Iran. *Humanit. Soc. Sci Commun.* 8, 63. <https://doi.org/10.1057/s41599-021-00741-w>.
- Pirker, H., Haselmair, R., Kuhn, E., Schunko, C., Vogl, C.R., 2012. Transformation of traditional knowledge of medicinal plants: The case of Tyroleans Austria who migrated to

Australia, Brazil and Peru. *J. Ethnobiology Ethnomedicine*. 8, 44. <https://doi.org/10.1186/1746-4269-8-44>.

POWO, 2024. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. <http://www.plantsoftheworldonline.org/> Accessed on [15.04.2024].

Rechinger, K.H. 1963-2015. *Flora Iranica*, 1–181. Akademische Druck- u. Verlagsanstalt und Naturhistorisches Museum Wien, Graz and Wien.

Sadeghi, Z., Kuhestani, K., Abdollahi, V., Mahmood, A., 2014a. Ethnopharmacological studies of indigenous medicinal plants of Saravan region, Baluchestan, Iran. *J. Ethnopharmacol.* 1531, 111–118.

Sadeghi, Z., Akaberi, M., Valizadeh, J., 2014b. *Otostegia persica* Lamiaceae: A review on its ethnopharmacology, phytochemistry, and pharmacology. *Avicenna J Phytomed.* 42, 79–88.

Sepanlou, S.G., Rezaei Aliabadi, H., Naghavi, M., Malekzadeh, R., 2022. GBD 2019 Iran Child Collaborators. Neonate, infant, and child mortality by cause in provinces of Iran: An analysis for the Global Burden of Disease Study 2019. *Arch. Iran Med.* 258, 484–495. <https://doi.org/10.34172/aim.2022.80>.

Sepehrdoust, H., 2009. Health care analysis and regional disparities in different provinces of Iran. *Iranian Economic Review IER, Faculty of Economics, University of Tehran.* 142, 113–134.

Skrine, C.P., 1931. The highlands of Persian Baluchistan. *Geogr. J.* 784, 321–338.

Spooner, B., 1988. Baluchistan: Geography, history, and ethnography. *Encyclopædia Iranica.* 3, 598–632.

Staub, P.O., Geck, M.S., Weckerle, C.S., Casu, L., Leonti, M., 2015. Classifying diseases and remedies in ethnomedicine and ethnopharmacology. *J. Ethnopharmacol.* 174, 514–519. <https://doi.org/10.1016/j.jep.2015.08.051>.

Tahvilian, R., Shahriari, S., Faramarzi, A., Komasi, A., 2014. Ethno-pharmaceutical formulations in Kurdish ethno-medicine. *Iran. J. Pharm. Res.* 133, 1029–39.

Townsend, C.C., Guest, E., Al-Rawi, A., 1966–1985. *Flora of Iraq*, vols 1, 2, 3, 4, 8, 9. Ministry of Agriculture & Agrarian Reform, Baghdad.

Weckerle, C.S., de Boer, H.J., Puri, R.K., van Andel, T., Bussmann, R.W., Leonti, M., 2018. Recommended standards for conducting and reporting ethnopharmacological field studies. *J Ethnopharmacol.* 210, 125–132. [https://doi: 10.1016/j.jep.2017.08.018](https://doi.org/10.1016/j.jep.2017.08.018).

Zanjari, N., Sadeghi, R., 2022. Measuring of older adults' well-being in provinces of Iran using age watch index. *Salmand: Iran. J. Ageing.* 164, 498–517. <http://dx.doi.org/10.32598/sija.2022.16.4.2814.1>