

## Wild edible plants and their traditional use in the human nutrition in Manyas (Turkey)

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Ethnobotany is a preliminary method of research, suitable for gathering information on the nutritional use of plants. This paper aims to present the ethnobotanical field research data on food plants used in Manyas region. It provides a general perspective on their significance in past and present Manyas, and examines the concept of wild edible plants as medicinal plants. The information about the use of wild edible plants was collected from 4 different open-air-markets and 14 villages in the city over a period of two years (2009-2011), through unstructured interviews. In this study, a total of 58 wild food plant taxa belonging to 25 families were established and also plant parts used, ethnographic data related to vernacular names, traditional use were recorded. Family Lamiaceae is represented by the highest number of taxa (10), followed by Astaraceae (7), Rosaceae (6), Apiaceae (5). The most commonly used species in the region are *Apium graveolens* L. (*kereviz*), *Oenanthe pimpinelloides* L. (*hadık*), *Petroselinum crispum* (Mill.) Fuss (*maydanoz*), *Lepidium sativum* L. (*tere*), *Nasturtium officinale* R. Br. (*gerdeme*), *Malva neglecta* Wallr. (*ebegümeci*), *Papaver rhoeas* L. (*gelincik*), *Rumex tuberosus* L. (*kuzukulağı*), *Rumex patientia* L. (*labada*), *Polygonum amphibium* L. (*kune*) and *Urtica dioica* L. (*ısrıgan*). The study showed that the plants used are either eaten raw, or cooked by boiling in water, frying in oil, baked to be served as dishes such as stew, *salad* as hot drink. The study can provide a basic data that may be helpful for prioritization of conservation through sustainable use and management of the resources.

**Keywords:** Wild food plants, Ethnobotany, Manyas, Turkey

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Millions of people in many developing countries do not have enough food to meet their daily requirements<sup>1</sup>. Despite the primary reliance of agricultural societies on domesticated plants and animals for food, the tradition of consuming wild plants has not been completely erased. Millions of people, particularly tribal and rural communities in many developing countries still collect and consume a wide variety of wild plant resources to meet their food requirements<sup>2,3</sup>. Wild edible plants are important in Mediterranean diet, which is a source of food and income for poor communities, and considered a healthy diet by many. In recent years, Mediterranean diet has been promoted as a model for healthy eating<sup>4</sup>. One of the main characteristics of Mediterranean diet is an abundance of plant food as fruits, vegetables, whole-grain cereals, nuts, and legumes. Wild edible

plants may satisfy the daily human need for elementary nutrition sources, particularly those of vitamins A & C, and for some minerals, according to WHO regulations<sup>5</sup>. Turkey, which has the largest coastal area in the Mediterranean, possesses an extraordinarily rich flora and a great traditional knowledge. Due to its climate and geographical position, Turkey, with its 10.000 taxa, is one of the richest countries in Europe and the Middle East, in terms of flora<sup>6,7</sup>. Turkey hosts more than 3000 endemic plant species, has high diversity of other taxa, and is almost entirely covered by three of the world's 34 biodiversity hotspots<sup>8</sup>. During the past decade, several studies have systematically analyzed the consumption and gathering of wild plants in Turkey<sup>9-14</sup>.

Several previous studies have described the traditional knowledge about the plants in the research area and the uses and different needs for them such as medicine<sup>15,16</sup>, local markets and more<sup>17</sup>. However,

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there is no concrete report about the nutritional potential of wild edible plants from the study area. Hence the study was undertaken. The present study aims at presenting the field research data on the use of wild food plants, which the authors collected in Manyas region, and at trying to provide a general perspective on their significance in Manyas- Balıkesir past and present life and culture. The issues related to the use of wild food plants in the local diet as vegetables, fruits, herbal tea, spices, in the preparation of beverages, and their concept and significance in Manyas have been examined. On the other hand this study identified not only the wild collected plants for food purposes by local people of Manyas, but also conducted to serve some cultural edible plants.

## Materials and methods

### Study area

Manyas is located in South of the Marmara Region (Fig. 1). Manyas is neighbour to Bandırma town in the West, Gönen in the West and North west, Balıkesir city center in South, Susurluk in the South east and Balya in the South west. Manyas district covers an area of approximately 586 sq km. The Manyas district has 44 villages and 3 towns. Manyas Province is subject to the influence of the Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. Mean daily temperature is 14.1 °C. Annual rainfall is 674 mm. Study area belongs to the Mediterranean Plant Geography Region and falls within the A1(A) grid square according to the Grid classification system developed by Davis<sup>18</sup>. Manyas region is the flatness of the terrain in places located around the mountains in the form of series. The current land is 65 % plain and 35 % mountainous. Manyas southern and South western parts is surrounded by mountainous terrain.



Fig. 1 — Geographical location of the study area

One of the key places in the region is Manyas lake. Manyas or 'Bird Lake' (40° 11' N, 27° 58' E), is situated 14 km from the South eastern coast of the sea of Marmara, Turkey. Its origin is tectonic, related to the well known seismicity of the Western Anatolian Fault<sup>19</sup>. Lake Manyas has been known to be one of the most important world wide natural reserve for migratory birds and wild fowl species. According to the data from Turkish Statistical Institute (<http://tuikapp.tuik.gov.tr>) Turkey's population is 73.722.988 and Manyas's population is 22.277 as of the date of 31<sup>th</sup> December 2010<sup>15</sup>. The total population is 22.000 while the rural population is around 15.000 according to population census conducted in 2010.

### Plant materials

The field work was carried out over a period of approximately three years (2009-2011). Special attention was paid to conduct the field trips along with the resource people on most of the field visits. Plant diagnosis has been made from the samples prepared for Balıkesir University herbarium. The taxonomic determination of the material was carried out according to Davis (1965–1988)<sup>18</sup>. The names of plant families were listed in alphabetic order. Scientific names of plant species were identified according to the plant list (<http://www.theplantlist.org> - <http://www.ipni.org>).

### Interviews with local people

Field research was conducted by collecting information about the wild food plants through structured and semi-structured interviews with knowledgeable members of the local population. A questionnaire was administered to the local people, through face to face interviews. The age of the informants was between 21 and 81 yrs. Interviews were done on the busy hours of common areas (bazaars, tea houses, farms, gardens, etc.). The questionnaire was generally administered to people over 40 who have more knowledge about plants. The people who had knowledge of plants were visited at least twice; one of these visits was particularly paid to their houses (Fig. 2). During the interviews, demographic characteristics of the study participants, and local names, utilized parts and preparation methods of the wild food plants were recorded. The people who participated in the study were requested to show the wild plants they used.

### Calculations

The use value<sup>20</sup>, a quantitative method that demonstrates the relative importance of species known



Fig. 2 — Interview with local people

locally, was calculated according to the following formula:

$$UV = U/N,$$

Where, UV refers to the use value of a species; U is the number of citations per species; and N is the number of informants.

## Results and discussion

### Demographic characteristics of study participants

The informants for this study consist of people who live in Central Manyas and the villages attached to the Centre. Information was collected from 115 informants (64 female and 51 male). Average age 50 yrs, who have used wild plants in their diet under varied circumstances and sold these plants in the local markets of Manyas. 21 informants never received regular education. A total of 42 of the participants were primary school graduate, 27 were secondary school graduate, 16 were high school graduate and 9 were university graduates.

### Use of wild plants as food

The interviews were individually carried out with members of the local Manyas (Balıkesir) population. Most of the selected informants belong to those families who have a strong connection with traditional agriculture for their day-to-day needs. A total 58 taxa of wild edible plants have been used in the study area. The most common families are: Lamiaceae (10 plants),

Asteraceae (7 plants), Rosaceae (6 plants), Apiaceae (5 plants), Polygonaceae (4 plants). The overall number of taxa cited of the most used botanical families can be seen in Figure 3 (Fig. 3). The most commonly used species are *Apium graveolens* (kereviz), *Oenanthe pimpinelloides* (hadık), *Petroselinum crispum* (maydanoz), *Lepidium sativum* (tere), *Nasturtium officinale* (gerdeme), *Malva neglecta* (ebegümeci), *Papaver rhoeas* (gelincik), *Rumex tuberosus* (kuzukulağı), *Rumex patientia* (labada), *Polygonum amphibium* (kune) and *Urtica dioica* (ısrırgan). These plants are very common among the local communities in Manyas (Table 1).

The list of species is presented in alphabetical order by Latin name and includes data on family, local name(s), parts used, and mode of preparation (Table 1). Aerial parts, branches, flowers, fruits, leaves, roots, seeds, stems, and tubers are used as food. Wild edible plants are consumed in a variety of ways in the Manyas. The identified consumption types are divided

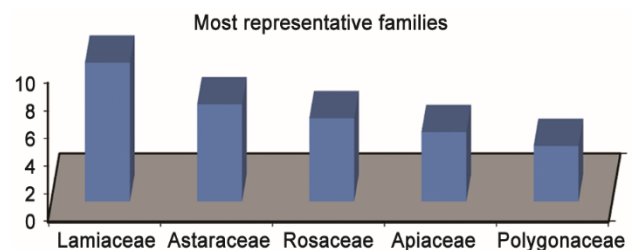


Fig. 3 — Most representative families

Table 1 — Wild food plants in Manyas, Balıkesir

Plant No.	Family	Plant species, voucher specimen	Vernacular name of Manyas	Edible parts <sup>a</sup>	Utilization methods	UV
1	Amaryllidaceae	* <i>Allium cepa</i> L. NP-353	<i>Soğan</i>	See, Lea	Added to foods by milling its seeds; as spice; eaten fresh; leaves eaten in <i>salads</i> .	0.34
2	Anacardiaceae	<i>Pistacia terebinthus</i> L. NP-41	<i>Çitlembik, çetlemik</i>	See	As spice; prepared sour souce is added to food, and <i>salads</i> .	0.51
3	Apiaceae	* <i>Apium graveolens</i> L. NP-42	<i>Kereviz</i>	Aer	Cooked as a stew or egg-vegetable dish.	
4		<i>Eryngium campestre</i> L. NP-44	<i>Şeker diken</i>	Aer	Cooked as a stew or egg-vegetable dish.	0.12
5		<i>Oenanthe pimpinelloides</i> L. NP-56	<i>Kavallık, badıbacağı, hadık, sakarotu</i>	Lea	Cooked as a stew or egg-vegetable dish. Eaten fresh, and as <i>salad</i> .	0.09
6		* <i>Petroselinum crispum</i> (Mill.) Fuss NP-51	<i>Maydanoz</i>	Aer	As <i>salads</i> .	0.55
7		<i>Tordylium aegaeum</i> Runem. NP-43	<i>Aşımtatik</i>	Lea	Cooked as a stew or egg-vegetable dish, and <i>salads</i> .	0.15
8	Asteraceae	<i>Anthemis altissima</i> L. NP-69	<i>Büyük papatya</i>	Flo	As herbal tea.	0.20
9		<i>Cnicus benedictus</i> L. NP-56	<i>Tülü diken</i>	Aer	Cooked as a stew or egg-vegetable dish, and as <i>salad</i> .	0.18
10		* <i>Cynara scolymus</i> L. NP-87	<i>Enginar</i>	Aer	Cooked as a stew or egg-vegetable dish.	0.40
11		<i>Petasites hybridus</i> (L.) G. Gaertner Mey&Scherb. NP-92	<i>Kaldrek, kaldrek, galdirel</i>	Aer	Cooked as a stew or egg-vegetable dish.	0.40
12		<i>Sonchus asper</i> (L.) Hill NP-112	<i>Süt diken</i>	Lea	As <i>salad</i> .	0.17
13		<i>Sonchus oleraceus</i> (L.) L. NP-91	<i>Sütlengeç</i>	Lea	Cooked as a stew.	0.13
14		<i>Silybum marianum</i> (L.) Gaertner. NP-113	<i>Kenger</i>	Ste, Lea, Lat	Eaten fresh, Cooked as a stew or egg-vegetable dish, as chewing gum.	0.24
15		<i>Inula heterolepis</i> Boiss. NP-89	<i>Ayıkulağı, yaban nanesi</i>	Lea	As spice.	0.27
16	Brassicaceae	<i>Capsella bursa-pastoris</i> (L.) Medik. NP-117	<i>Bit otu, leylek biti</i>	Aer	Cooked as a stew or egg-vegetable dish as <i>salad</i> .	0.43
17		<i>Lepidium sativum</i> L. NP-63	<i>Tere</i>	Lea	Leaves eaten in <i>salads</i> .	0.43
18		<i>Nasturtium officinale</i> R.Br. NP-90	<i>Gerdeme Su teresi</i>	Aer, Lea	Eaten fresh; leaves eaten in <i>salads</i> .	0.17
19	Chenopodiaceae	<i>Chenopodium album</i> L. RP-160	<i>Sirken</i>	Lea	Cooked as a stew or egg-vegetable dish.	0.17
20	Cornaceae	<i>Cornus mas</i> L. NP-62	<i>Kızılcık</i>	Fru	Eaten fresh, Fruits use as jam.	0.22
21	Dioscoreaceae	<i>Tamus communis</i> L. NP-96	<i>Tarla sarmaşığı, kır sarmaşığı, çertlemik</i>	Bra	Cooked as a stew or egg-vegetable dish Eaten fresh.	0.21
22	Elaeagnaceae	<i>Elaeagnus angustifolia</i> L. NP-118	<i>Iğde</i>	Fru	Eaten fresh.	0.29

Contd...

Table 1 — Wild food plants in Manyas, Balıkesir (*contd...*)

Plant No.	Family	Plant species, voucher specimen	Vernacular name of Manyas	Edible parts <sup>a</sup>	Utilization methods	UV
23	Ericaceae	<i>Arbutus unedo</i> L. NP-100	<i>Kocakarı yemişi,</i>	Fru	Eaten fresh, Cooked as a stew.	
24	Fabaceae	* <i>Cicer arietinum</i> L. NP-97	<i>Davulga</i>	Fru	Cooked as a stew or egg-vegetable dish.	0.24
25	Geraniaceae	<i>Erodium moschatum</i> (L.) L'Her. NP-119	<i>Nohut</i> <i>Kocakarı iğnesi</i>	Lea	Cooked as a stew or egg-vegetable dish.	0.32
26	Lamiaceae	<i>Clinopodium acinos</i> (L.) Kuntze NP-84	<i>Güve otu</i>	Lea	As spice.	0.09
27		<i>Lavandula stoechas</i> L. NP-123	<i>Karabaş otu</i>	Aer	As herbal tea.	0.14
28		<i>Mentha aquatica</i> L. NP-102	<i>Yaban nanesi, kurbağa nanesi</i>	Bra, Flo	As spice.	0.41
29		<i>Melissa officinalis</i> L. subsp. <i>officinalis</i> NP-68	<i>Oğul otu</i>	Bra, Flo	As herbal tea; as spice.	0.28
30		* <i>Ocimum basilicum</i> L NP-78	<i>Fesleğen</i>	Lea	As spice.	0.27
31		<i>Origanum vulgare</i> L.	<i>Yabani kekik, dağ kekiği</i>	Lea Flo	As spice. Eaten fresh.	0.41
32		<i>Phlomis russeliana</i> Sims. Lag. Ex Benth. NP-124	<i>Arı otu</i>	Bra, Flo	As herbal tea; as spice.	0.48
33		<i>Rosmarinus officinalis</i> L. NP-125	<i>Biberiye</i>		As spice.	0.38
35		<i>Salvia tomentosa</i> Miller. NP-82	<i>Adaçayı</i>	Bra, Flo	As herbal tea.	0.43
36		<i>Thymus zygoides</i> Griseb. NP-149	<i>Dağ Kekik</i>	Bra, Flo	As spice.	0.12
37	Lauraceae	<i>Laurus nobilis</i> L. NP-79	<i>Defne</i>	Lea	As spice.	0.37
38	Malvaceae	* <i>Hibiscus esculentus</i> L. NP-147 <i>Malva neglecta</i> Wallr. NP-148	<i>Bamya</i> <i>Ebegümeçi</i>	Fru Bra, Lea	Cooked vegetable dish. Cooked vegetable dish.	0.23 0.62
39	Moraceae	<i>Ficus carica</i> L. NP-143	<i>Yemiş, Yabani incir</i>	Fru	Eaten fresh; jam is made.	0.32
40		* <i>Morus nigra</i> L. NP-75	<i>Karadut</i>	Fru	Eaten fresh; jam is made.	0.37
41	Papaveraceae	<i>Papaver rhoeas</i> L. NP-101	<i>Gelincik</i>	Lea	Cooked as a stew or egg-vegetable dish.	0.22
42	Pedeliaceae	<i>Sesamum indicum</i> L. NP-132	<i>Susam</i>	See	Eaten fresh.	0.38
43	Pinaceae	* <i>Pinus pinea</i> L. NP-67	<i>Çam fıstığı</i>	See	Used with rice and used in pie cake.	0.55
44	Polygonaceae	<i>Polygonum cognatum</i> Meisn. NP-133	<i>Madımak</i>	Aer, Lea	Cooked vegetable dish; eaten fresh; leaves eaten in <i>salads</i> .	0.32
45		<i>Polygonum amphibium</i> L. NP-137	<i>Kune, ıstır, kızılbackak</i>	Lea	Cooked vegetable dish.	0.28
46		<i>Rumex tuberosus</i> L. NP-74	<i>Kuzukulağı, ekşikulak</i>	Lea	Cooked vegetable dish; eaten fresh; leaves eaten in <i>salads</i> .	0.33
47		<i>Rumex patientia</i> L. NP-76	<i>Labada</i>	Lea	Leaves cooked as vegetable.	0.18
48	Portulacaceae	* <i>Portulaca oleracea</i> L. NP-134	<i>Semiz otu</i>	Aer, Lea	Fresh as salad or cooked plant is with yogurt; leaves cooked as vegetable.	0.41
49	Rosaceae	* <i>Amygdalus communis</i> L. RP-93	<i>Badem</i>	See	Eaten as dried nuts; used in pie making.	0.43
50		* <i>Eriobotrya japonica</i> (Thunb.) Lindl. NP-139	<i>Malta eriği</i>	Fru	Eaten fresh.	0.15
51		* <i>Prunus domestica</i> L. NP-138	<i>Erik</i>	Fru	Eaten fresh; jam is made.	0.45

*Contd..*

Table 1 — Wild food plants in Manyas, Balıkesir (contd...)

Plant No.	Family	Plant species, voucher specimen	Vernacular name of Manyas	Edible parts <sup>a</sup>	Utilization methods	UV
52		<i>Rosa canina</i> L. NP-103	<i>Kuşburnu, öküzgötü</i>	Fru	As herbal tea; jam is made; syrup is prepared.	0.56
53		<i>Rosa sempervirens</i> L. NP-77	<i>Kuşburnu, öküzgötü</i>	Fru	As herbal tea; jam is made; syrup is prepared.	0.56
54		<i>Rubus canescens</i> DC. var. <i>glabratus</i> (Gordon) Davis et Meikle NP-138	<i>Karamık, karamuk, böğürtlen</i>	Fru	Eaten fresh; jam is made.	0.44
55	Tilliaceae	<i>Tilia argentea</i> Desf. Ex Dc. NP-142	<i>Ihlamur</i>	Bra, Flo	As herbal tea.	0.52
56	Urticaceae	<i>Urtica dioica</i> L. NP-104	<i>Isırgan</i>	Lea	Cooked as a stew or egg-vegetable dish.	0.60
57		<i>Urtica urens</i> L. NP-105	<i>Isırgan</i>	Lea	Cooked as a stew or egg-vegetable dish.	0.42
58	Valerianaceae	<i>Valeriana dioscoridis</i> Sm. NP-114	<i>Sakar otu</i>	Lea	As salad.	0.22

<sup>a</sup> Plant part(s) used: Aer, aerial parts; Bra, branches; Flo, flowers; Fru, fruits; Lea, leaves; Lat, latex; Roo, roots; See, seeds; Ste, stems; Tub, tubers.

\*Culture plants

into main categories: green *salad* (fresh plants and dressing), *salad* after boiling, *salad* with yogurt, raw/fresh, main dish (sautéed with oil and onion), pastry/pie, jam, syrups, soup, pickle, and stuffed. However, it must be noted that many species could be classified in more than one category. They can be used as fruit or spice by boiling them with water, rice, meat and egg or as a filling ingredient for pies.

Aerial parts, stems and leaves are most often used in food preparation as leafy vegetables. The high percentage of raw consumption of plants could be explained by consumption of plants as *salad* with olive oil, one of the important characteristics of Mediterranean diet. *Portulaca oleracea* L., *Papaver rhoeas* L., *Rumex acetosella* L., *Sonchus asper* L. (Hill), *Valeriana dioscoridis* Sm. and *Tordylium aegaeum* Runemark are examples to these plants. Some of them are consumed as cooked vegetable dish (*Capsella bursa-pastoris* (L.) Medik, *Chenopodium album* L., *Eryngium campestre* L., *Malva neglecta*, *Petasites hybridus* (L.) G. Gaertner Mey&Scherb., *Papaver rhoeas*, *Polygonum cognatum* Meisn., *Portulaca oleracea*, *Urtica dioica*). In this study area, stuffed rolls (so called “*sarma*” rolls) is a popular dish made especially with rice, but sometimes wheat (*bulgur*) is preferred. *Sarma* rolls are primarily wrapped with the leaves of the *Petasites hybridus*, *Rumex patientia*.

When we examined the ways of consumption of plants in the study area, we determined that they are mostly consumed as main course. However some species, such as *Arbutus unedo* L., *Cornus mas* L.,

*Ficus carica* L., *Morus nigra* L., *Rosa canina* L., *Rubus canescens* DC. and *Prunus domestica* L. are consumed as fruit. They can be consumed fresh (*Arbutus unedo*, *Cornus mas*, *Ficus carica*, *Morus nigra*, *Rubus canescens*) and dried (*Rosa canina*, *Ficus carica*, *Prunus domestica*). It was determined that *Cornus mas* and *Ficus carica*, *Prunus domestica* are consumed as jam. The fruits gathered during the summer or autumn (apples, plums, and pears) are cut in slices and dried. They are consumed directly or stewed and sweetened in winters.

Flowers and branches are most used as spice (12 species) or as herbal tea (8 species). *Clinopodium acinos* (L.) Kuntze, *Mentha aquatica* L., *Ocimum basilicum* L., *Origanum vulgare* L., *Rosmarinus officinalis* L., *Thymus zygoides* Griseb., *Laurus nobilis* L. and *Inula heterolepis* Boiss. are dried and used as a spice in Manyas, while very rarely consumed fresh. It is common to consume wild plants as tea. *Rosa canina*, *Melissa officinalis* L., *Salvia tomentosa* Mill., *Rosmarinus officinalis* L., *Anthemis altissima* L. are consumed as herbal tea in Manyas.

It was observed that some wild food plant taxa are sold as wild in many open markets of Manyas - Balıkesir. *Rosa canina*, *Malva neglecta*, *Rumex tuberosus*, *Urtica dioica*, *Petasites hybridus*, *Tilia argentea*, *Silybum marianum* and *Lavandula stoechas* are among the herbs extensively collected and sold in the Manyas area. Collecting and trading these species that grow in vast localities in the region have become the source of income for hundreds of local people.

This is the first ethnobotanical research in the Manyas region. No previous ethno studies are reported

to have been conducted in Manyas. When compared, the results of this work show similarities with the findings of the studies carried out in neighbouring regions. In a study that was done in Savaştepe region on wild edible plants 71 plants had been recorded<sup>21</sup>. In another study done in Marmara island 9 edible plants were recorded<sup>22</sup>. The other studies mostly focused on medicinal plants<sup>4,15</sup>, one of them on local plant names<sup>23</sup> and the other on dye plants<sup>24</sup>.

### New findings

The results of this study compared to the findings of other studies carried out in nearby areas, recorded some new usages of plants. *Sonchus oleraceus*, *Inula heterolepis* and *Tordylium aegaeum* have been recorded as edible plant in Balıkesir for the first time. Savaştepe, Marmara island are close to our field of study. The local plant names are mostly same. Some local plant names used in these areas that differ are: *Nasturtium officinale* (*su kazayağı*), *Lavandula stoechas* (*Kocabaş otu*), *Melissa officinalis* (*Limon otu*), *Ocimum basilicum* (*Reyhan*), *Phlomis russeliana* (*Sorkuç*), *Thymus zygoides* (*Bayır çayı*, *Kaya kekiği*, *Nuzla otu*)<sup>21</sup>, *Pistacia terebinthus* (*menengiç*, *sakız*), *Urtica dioica* (*Sirgan*)<sup>22</sup>.

### Data analysis

According to the calculation made on the basis of the use-value UV<sup>20</sup>. *Malva neglecta* (0.62), *Urtica dioica* (0.60), *Rosa canina* (0.50), *Origanum vulgare* (0.48), *Capsella bursa-pastoris* (0.43), *Lavandula stoechas* subsp. *stoechas* (0.41), *Petasites hybridus* (0.40), and *Rosmarinus officinalis* (0.38) were reported to be of the highest use value (Table 1).

### Conclusion

In total, 58 taxa that were identified as wild edible plants in the study area belong to 25 different families, Lamiaceae being the most commonly consumed family in the Manyas region. The most commonly used species are *Apium graveolens* (*kereviz*), *Oenanthe pimpinelloides* (*hadık*), *Petroselinum crispum* (*maydanoz*), *Lepidium sativum* (*tere*), *Nasturtium officinale* (*gerdeme*), *Malva neglecta* (*ebegümeçi*), *Papaver rhoeas* (*gelincik*), *Rumex tuberosus* (*kuzukulağı*).

Collecting information about how people deal with their natural surrounding is not only important for recording local cultural traditions and the richness of its heritage, but also gives information necessary to protect the natural habitat in the long term. The present

study shows the function of wild edible plants as a sign of the cultural identity of Manyas people and also reveals the vital importance of wild plants in building the typical taste and characteristic methods of preparing and eating food. In the study, it is observed that uses of some of wild food plants are same as indicated in literature while some of them are new records. Among all the edibles, we recorded some new uses for Turkey. *Polygonum amphibium* and *Rumex patientia* leaves are consumed as cooked vegetable dish in the region.

The data we have presented here showed that gathering, processing and consuming wild edible plants are still important activities in the Manyas. Today many people in the region have been exposed to modernisation and globalisation processes and are influenced by national and international economic transformations and trends. So local people specialise in collecting natural products that are increasingly demanded in both Turkey and abroad. We suggest that the cultural heritage handed over through generations about wild edible plants, which are important as a food source, should be studied and presented for the use of all humanity.

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