

An ethnobotanical study of Kırklareli (Turkey)

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Abstract. An ethnobotanical study was carried out in the villages of the Kırklareli province, Turkey. The information was obtained from local people by means of direct interviews and classified according to the use of plants for food, tea, spice, dye, fodder, as well as for miscellaneous uses. The study revealed 105 plant taxa belonging to 50 plant families that were useful to the villagers of this area.

Key words: ethnobotany, Kırklareli, Turkey, useful plants

Introduction

Kırklareli province is situated in the European part of Turkey (41°13'34"–42°05'03"N, 26°54'14"–28°06'15"E), at an altitude of 203 m, and covers an area of 6650 km² (Fig. 1). Its population numbers about 328461, according to the state population census in 2000 (Anonymous 2005). The majority of the population consists of immigrants from the Balkans. The province has seven districts and 177 villages (Karaçam 1995; Yılmaz 2000).

The European part of Turkey (Turkish Thrace) covers 23 500 km² and has approximately 2500 vascular plant species (Özhatay & Byfield 2000). It

represents two different climate types, with annual rainfall of 570 mm and temperature of 13 °C. The vegetation of the area comprises forests of *Carpinus*, *Quercus*, *Fagus* and a special forest community of *Alnus*, *Fraxinus*, *Salix*, and *Ulmus* named "Longoz".

The Ergene river basin, Mt Istranca and İğneada Longoz Forest are parts of the Kırklareli province and have been determined as Important Plant Areas of Turkey (Özhatay & al. 2003).

The aim of this ethnobotanical study is to collect systematic information about the still obtaining ethnobotanical usages in Kırklareli before they are completely lost.

This is part of a project entitled *Ethnobotanical Investigation of the Kırklareli Province, Turkey* and supported by the Istanbul University Research Fund during the period 2001–2004 (Kültür 2004). The other part of project, which deals with the medicinal plants of Kırklareli, has been recently published (Kültür 2007). In this paper, priority goes to the description of useful plants in the Kırklareli district.



Fig. 1. The map of Kırklareli province.

Material and methods

The study was carried out in the period 2001–2004, from April through October, when plants were in flowering and fruition. The information on the local names of plants, their usage and preparation was obtained from local people (300 respondents) through individual interviews. Most respondents were also asked about the source of their knowledge, in order to eliminate information of secondary nature. The information was checked with other areas and neighbouring villages, so as to verify its accuracy. The plants were collected with the help of respondents.

The collected fresh material was numbered and kept as samples for botanical identification. Taxonomic determination of the collected specimens was according to the *Flora of Turkey and East Aegean Islands* (Davis 1965–1985; Davis & al, 1988; Güner & al. 2000). A voucher specimen of each species is kept in ISTE (the Herbarium of the Istanbul University, Faculty of Pharmacy). Some plant material inconvenient for herbarium storage is kept in bottles, with the number of the collector SK (Şükran Kültür).

Results and discussion

During this project (Kültür 2004), 498 voucher specimens were collected in the investigated area. According to identification results, 126 traditional medicinal plants (100 wild species and 26 cultivated plant species) have been reported from Kırklareli (Kültür 2007).

Identification of the specimens from our field collections revealed 105 species belonging to 50 plant families. Among these plants, 19 species have only local name without any uses (see Table 7), 37 species are used as food (Table 1), 13 species are brewed for tea (Table 2), six species are used as spice (Table 3), 12 species are used for dying (Table 4), 14 species are used as animal fodder (Table 5), and 29 species are used for different purposes (Table 6). Ethnobotanical uses of the plants are given under their family names, in alphabetical order. In the respective columns are put the local name and which parts of the plants are used. The last column shows their application and voucher specimen numbers.

Most respondents stated that they have learned the ethnobotanical uses of plants from their parents and elderly relatives.

Wild-growing plants were not considered as holding the same economic value as cultivated plants in the studied area. Only *Cotinus coggyria*, *Hypericum perforatum*, *Rosa canina*, *Sideritis montana* subsp. *montana*, *Sideritis scardica* subsp. *scardica*, *Tilia platyphyllos* were sold in markets and public bazaars. On the other hand, some of the wild plants apparently were collected by villagers for commercial purposes: *Hypericum perforatum*, *Cynodon dactylon*, *Urtica dioica*, *Leucojum aestivum*, *Origanum vulgare*, *Sambucus ebulus*, *Sorbus domestica*, *Cydonia oblonga*, *Salix alba*, *Ruscus aculeatus*, *Artemisia absinthium*, *Rosa canina*, *Equisetum telmateia*, *Numphar lutea* (Kültür 2007).

Besides the wild species reported here, the major food and animal fodder plants of the Kırklareli region include: wheat (*Triticum aestivum*), barley (*Hordeum sativum*), oats (*Avena sativa*), corn (*Zea mays*), vetch (*Vicia sativa*), alfalfa (*Medicago sativa*), rye (*Secale cereale*), paddy rice (*Oryza sativa*), sunflower (*Helianthus annuus*), potato (*Solanum tuberosum*), sugar beet (*Beta vulgaris*), beans (*Phaseolus vulgaris*), chickpea (*Cicer arietinum*), onion (*Allium cepa*), garlic (*Allium sativum*), spinach (*Spinacia oleracea*), tomato (*Lycopersicon esculentum*), eggplant (*Solanum melongena*), carrot (*Daucus carota*), melon (*Cucumis melo*), watermelon (*Citrullus lanatus*), peach (*Persica vulgaris*), sweet cherry (*Cerasus avium*), and, plum (*Prunus domestica*).

Some mushrooms are collected for food by the local people in the investigated area: *Boletus edulis*, *B. luteus* (Allah ekmeği, Dedeman, Bolet, Polen), *Hydnum repandum* (Sığır dili mantarı), *Craterellus cornucopioides* (Borazan), *Morchella* sp. (Kuzu kulağı), *Lepiota* sp. (Dedeleş, Şalvarlı mantar, Dodoleç, Dedemik).

Some species have two different uses: food and to keep fleas away (*Sambucus ebulus*); food and ornamental (*Centaurea cyanus*); food and chewing gum (*Cichorium intybus*); food and material for agricultural tools (*Cornus mas*); food and tea (*Malva sylvestris*, *Rubus canescens* var. *glabratus*); food and dye (*Malus sylvestris* subsp. *orientalis* var. *orientalis*, *Mespilus germanica*); spice and tea (*Thymus longicaulis* subsp. *longicaulis* var. *subisophyllus*, *Mentha longifolia* subsp. *typhoides* var. *typhoides*); animal fodder and material for barrels and waterbottles (*Quercus cerris* var. *austriaca*); dye and protection of clothes against moths (*Juglans regia*); food and yoghurt-making (*Prunus spinosa* subsp. *dasyphylla*); food and material for spoons (*Pyrus elaeagnifolia* subsp. *elaeagnifolia*); food and

material for kneading troughs (*Rubus discolor*). *Urtica dioica* is used for four different purposes: food, tea, animal fodder and hair care. *Sambucus nigra* is also used for three different purposes: food, tea and toys.

Many specimens have different common names. For example, *Rosa canina* is known as kuşburnu, yaban gülü, yabani gül, köpek gülü, gözkıvıšťran, gültikeni, gülbubusu, gül buğucuğu; *Plantago major* subsp. *major* as sinirliot, sinirotu, damarotu, damarlıot, kesikotu, keskinotu; *Rubus discolor* as karamuk, böğürtlen, kapina, böğürtlen diken, özmenek, ahududu. Some plants have one and the same local name in spite of belonging to different species, for instance: *Sambucus nigra* and *S. ebulus* (Mülver); *Plantago lanceolata* and *P. major* subsp. *major* (sinirliot, sinirotu, damarotu, damarlıot, kesikotu); *Rubus discolor* and *R. canescens* var. *glabratus* (böğürtlen and kapina).

Of the 105 species identified in this study, 37 species (35.2 %) were used for food; 13 species (12.3%) for tea; six species (5.7%) for spice; 12 species (10.4%) for dye; and 14 species (13.3%) for animal fodder. Another 29 plant species (27,6 %) were used for different purposes. Of the observed species, 19 have only vernacular names, without any usages in the investigated area.

Local people use various parts of the plants for food. Of the 37 plant species that have been identified for this purpose, 18 species (48.6%) are utilized for their leaves; 15 species (40.5%) are utilized for their fruits; and four species (10.8%) are utilized for their aerial parts. Only one species (2.7%) is used for its stem (*Carduus nutans* subsp. *leiophyllus*).

Our recorded data were compared with some earlier published ethnobotanical studies in Turkey (Eyüboğlu & al. 1983; Özçelik 1987; Öztürk & Özçelik 1991; Lyle-Kalças 1992; Akalın & Alpınar 1994; Baytop 1994, 1999; Gümüş 1994; Yıldırım 1994; Yıldırım 1994; Işık & al. 1995; Sayar & al. 1995; İlçim & Varol 1996; Vural & al. 1997; Duran 1998; Ertuğ 1999, 2000, 2004; Bağcı 2000; Dönmez 2000; Abay & Kılıç 2001; Duran & al. 2001; Şimşek & al. 2001, 2004; Keskin & Alpınar 2002; Akçiçek & Vural 2003; Doğan & al. 2003, 2004; Özgökçe & Yılmaz 2003; Ecevit & Özhatay 2004; Özgen & al. 2004; Özusu 2005; Tuzlacı 2005a, b; Bulut & Tuzlacı 2006; Elçi & Erik 2006; Ezer & Arısan-Mumcu 2006; Şenol & al. 2006; Özbucak & al. 2007; Tuzlacı & Alparlan 2007).

The use of *Sambucus ebulus* and *S. nigra* fruits for jam; the leaves of *Agrostemma githago*, *Atriplex tatarica*

and *Morus nigra*, the stems of *Carduus nutans* subsp. *leiophyllus* for food; the flowers of *Sambucus nigra*, *Malva sylvestris*, the herbs of *Hypericum perforatum*, *Sideritis montana* subsp. *montana*, *S. scardica* subsp. *scardica*, *Urtica dioica*, the leaves of *Cydonia oblonga* for tea; the young shoots of *Acer campestre* subsp. *campestre*, the bark of *Fraxinus ornus* subsp. *ornus*, *Malus sylvestris* subsp. *orientalis* var. *orientalis* and the leaves of *Persica vulgaris* as natural dye were not found in literature and were recorded for the first time in this study.

The use of *Bromus arvensis*, *Dorycnium pentaphyllum* subsp. *herbaceum*, *Medicago orbicularis*, *Melilotus alba*, *Trifolium campestre*, *T. incarnatum* var. *molinieri*, *T. nigrescens* subsp. *petrisavii*, *T. repens* var. *macrorrhizum*, *Vicia cracca* subsp. *gerardii*, and *Urtica dioica* as animal fodder was also not found in literature.

The use of the wood of *Acer campestre* subsp. *campestre*, *Cornus mas*, *Pinus sylvestris*, *Populus tremula*, *Ulmus minor* subsp. *canescens* for agricultural tools; the wood of *Quercus cerris* var. *austriaca* and *Pinus sylvestris* for barrels and waterbottles; the leaves of *Buxus sempervirens* and the flowers of *Centaurea cyanus* as ornaments; the wood of *Sambucus nigra* and the stems of *Conium maculatum* as a toys for children; the young shoots of *Corylus avellana* var. *avellana*, *Salix alba* and *Vitis sylvestris* for basket-making; the leaves of *Petasites hybridus* for umbrellas; the leaves of *Juglans regia* for protection of clothes against moths; the fruits of *Hordeum vulgare* to bring good fortune; the leaves of *Sambucus ebulus* as fleafuge; the young shoots of *Prunus spinosa* subsp. *dasyphylla* for making yoghurt; the wood of *Pyrus elaeagnifolia* subsp. *elaeagnifolia* for spoon-making; the wood of *Rubus discolor* for making of kneading troughs; the fruits of *Datura stramonium* for filtering milk; the sap of stems of *Vitis sylvestris* for hair care; the roots of *Heracleum spondylium* subsp. *ternatum* for keeping insects and snakes away and as a supplement to the fodder of animals (goats) for increasing milk production; as well as the use of aerial parts of *Conium maculatum* for cattle to keep warm could not be found in literature and are reported for the first time in Turkey.

The study shows that the people who live in the mountain villages with very little arable land and who do not have sufficient funds to invest into contemporary agricultural tools use the plants for making traditional agricultural implements. Their remoteness from

the production and distribution centers of industrial food products increases the prices of these goods, whereas the variety and richness of plants around the villages makes their consumption as food very reasonable. For the same reason they are used as dyes, material for heating and fodder. The villagers with low income level benefit strongly from plants by maintaining their traditional customs.

This study indicates how important it is to document not only medicinal plants but also edible plants, or plants used for fodder, fuel, dyes and different usages before the knowledge of these usages has been lost,

owing to an ebb in passing the knowledge from older to younger generations.

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Table 1. The plants used as food in Kırklareli province.

Family and species names	Turkish local names	Parts used	Use application & Voucher specimen, ISTE
1	2	3	4
Amaranthaceae			
<i>Amaranthus retroflexus</i> L.	İştir, iştir	Leaves	Cooked (80908, 81038)
Boraginaceae			
<i>Trachystemon orientalis</i> (L.) G. Don	Kaldırak, ısıpıt, ispit, ispir	Herb	Cooked (80824)
Caprifoliaceae			
<i>Sambucus ebulus</i> L.	Sultanotu, Pıyran, Haptovina, Mülver Âdemotu, Piran	Fruit	As jam (80069, 80961, 81051)
<i>S. nigra</i> L.	Mürver, Mürver çiçeği, Mülver, Mürver ağacı	Fruit	As jam (80089, 81007)
Caryophyllaceae			
<i>Agrostemma githago</i> L.	Karamık, karamuk	Leaves	Cooked (80140)
Chenopodiaceae			
<i>Atriplex tatarica</i> L.	Sirken otu	Leaves	Cooked (80910)
<i>Chenopodium album</i> L. subsp. <i>album</i> var. <i>microphyllum</i> (Boenn.) Aellen	Oşkuran	Leaves	Cooked (80909)
Compositae			
<i>Carduus nutans</i> L. subsp. <i>leiophyllus</i> (Petr.) Stoj. & Stef.	Deve diken, eşek diken, çakır diken, eşek generi	Stem	After bark is peeled (80162, 80904)
<i>Centaurea cyanus</i> L.	Taç çiçeği	Leaves	Cooked (80952)
<i>Cichorium intybus</i> L.	Sakız otu, hindiba, sakız çiçeği	Leaves	Cooked (80799, 80822, 80951)
Cornaceae			
<i>Cornus mas</i> L.	Kızılçık	Fruit	Eaten fresh or in jam or marmalade (80178)
Cruciferae			
<i>Capsella bursa-pastoris</i> (L.) Medik.		Leaves	Cooked (80041)
Elaeagnaceae			
<i>Elaeagnus angustifolia</i> L.	İğde	Fruit	Eaten fresh (80043)
Labiatae			
<i>Lamium purpureum</i> L. var. <i>purpureum</i>	Ballıbaba	Herb	Cooked (81081)
Malvaceae			
<i>Malva sylvestris</i> L.	Ebegümece, gömeçotu	Leaves	Cooked (80072, 80956, 81044)
Moraceae			
<i>Morus nigra</i> L.	Karadut	Leaves Fruit	Cooked (SK 23) Eaten fresh
Papaveraceae			
<i>Papaver rhoeas</i> L.	Gelincik, gelincikotu, borcanka	Herb	Cooked (80035, 80929, 80968)

Table 1. Continuation.

1	2	3	4
Plantaginaceae			
<i>Plantago lanceolata</i> L.	Sinirliot, sinirotu, damarotu, damarlıot, kesikotu, bobvitsa	Leaves	Cooked (81002)
<i>Plantago major</i> L. subsp. <i>major</i>	Sinirliot, sinirotu, damarotu, damarlıot, kesikotu, keskinotu,	Leaves	Cooked (81009, 81039)
Polygonaceae			
<i>Rumex acetosella</i> L.	Kuzu kulağı, keçi sakalı, keçeotu	Leaves	Cooked (80201, 80860)
<i>R. crispus</i> L.	Yabani labada, acı labada, tatlı labada, konştrak	Leaves	Cooked (80042, 80138, 80136, 81052)
<i>R. dentatus</i> L. subsp. <i>halacsyi</i> (Rech.) Rech. f.	Labada, kırırtrak	Leaves	Cooked (80992)
<i>R. pulcher</i> L.	Labada, kırırtrak, acı labada, efelek, ıştavek	Leaves	Cooked (81043)
Portulacaceae			
<i>Portulaca oleracea</i> L.	Semizotu	Herb	Cooked (80859b)
Rosaceae			
<i>Malus sylvestris</i> Mill. subsp. <i>orientalis</i> (Uglitzk.) Browicz var <i>orientalis</i>	Yabani elma, ekşi elma, yabani ekşi elma, domuz elması	Fruit	As pickle (80194, 81058)
<i>Mespilus germanica</i> L.	Muşmula, yabani muşmula	Fruit	Eaten fresh, or as pickle (80181, 81062)
<i>Prunus spinosa</i> L. subsp. <i>dasyphylla</i> (Schur) Domin	Güvem diken, güvem, veskruş, güvem tiken	Fruit	As pickle, or in jam or marmalade or compote (80030, 81067)
<i>P. divaricata</i> Ledeb. subsp. <i>ursina</i> (Kotschy) Browicz	Güvem	Fruit	As marmalade or jam or compote (80932)
<i>Pyrus elaeagnifolia</i> Pall. subsp. <i>elaeagnifolia</i>	Yaban ağlatı, ahlat, yaban armudu	Fruit	As pickle (81060)
<i>Rosa canina</i> L.	Kuşburnu, yaban gülü, yabani gül, köpek gülü, gözükviştran, gültiken, gülbubusu, gül buğucuğu	Fruit	Eaten fresh or as in jam or marmalade (80059, 81071, 81082)
<i>Rubus discolor</i> Weihe & Nees	Karamuk, böğürtlen, kapina, böğürtlen diken, özmenek, ahududu	Fruit	Eaten fresh or as in jam or marmalade (80081)
<i>R. canescens</i> DC. var. <i>glabratus</i> (Godr.) Davis & Meikle	Böğürtlen, kupina, kapina, kuşüzümü	Fruit	Eaten fresh or as in jam or marmalade (80821)
<i>Sorbus domestica</i> L.	Üvez, Börtlücan	Fruit	Eaten fresh (80917, 81068)
<i>S. torminalis</i> (L.) Crantz var. <i>torminalis</i>	Böğürtlecan	Fruit	Eaten fresh (80987)
Urticaceae			
<i>Urtica dioica</i> L.	Isırgan, ısırganotu, kopriga, büyük ısırgan	Leaves	Cooked (80018, 80882, 81041)
Vitaceae			
<i>Vitis sylvestris</i> C.C. Gmel.	Yabani asma, kuş üzümü, yabani üzüm	Leaves	Cooked (81063)
Liliaceae			
<i>Allium scorodoprasum</i> L. subsp. <i>rotundum</i> (L.) Stearn	Ayı sarmısağı, yabani sarımsak	Leaves	Cooked (80955)

Table 2. The plants used as tea in Kırklareli province.

Family & species names	Turkish local names	Parts used	Voucher specimen, ISTE
1	2	3	4
Caprifoliaceae			
<i>Sambucus nigra</i> L.	Mürver, Mürver çiçeği, Mülver, Mürver ağacı	Flower	80089, 81007
Hypericaceae			
<i>Hypericum perforatum</i> L.	Kantaron, kantaron çayı, sarı kantaron, kantaryon, sarıcaş, kantül, kesik otu, mide otu, kalp otu,	Herb	80023, 80899
Labiatae			
<i>Melissa officinalis</i> L. subsp. <i>officinalis</i>	Oğulotu, arıotu	Herb	81042
<i>Mentha longifolia</i> (L.) Huds. subsp. <i>typhoides</i> (Briq.) Harley var. <i>typhoides</i>	Yabani nane, dere nanesi	Leaves	80975

Table 2. Continuation.

1	2	3	4
<i>Sideritis montana</i> L. subsp. <i>montana</i>	Tilkikuyruğu	Herb	80935, SK 18
<i>S. scardica</i> L. subsp. <i>scardica</i>	Kuyruklu adaçayı, kırçayı, taşlık çayı, başak çayı, pazlak çayı, çiçek çayı, kuyruk çayı, bazlak çayı, adaçayı, karlık çayı, karlı çay, tilkikuyruğu	Herb	80838, 81028, SK 20
<i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> var. <i>subisophyllus</i> (Borbás) Jalas	Keklikotu, kekikotu, kekik, kekikçayı	Herb	80087, 80871
Malvaceae			
<i>Malva sylvestris</i> L.	Ebegümece, gömeçotu	Flower	80072, 80956, 81044
Rosaceae			
<i>Cydonia oblonga</i> Mill.	Ayva	Leaves	80044, 81084
<i>Rosa canina</i> L.	Kuşburnu, yaban gülü, yabani gül, köpek gülü, gözkıvıstran, gültiken, gülbubusu, gül buğucuğu	Fruit	80059, 81071, 81082
<i>Rubus canescens</i> DC. var. <i>glabratus</i> (Godr.) Davis & Meikle	Böğürtlen, kupina, kapina, kuşüzümü	Leaves	80821
Tiliaceae			
<i>Tilia platyphyllos</i> Scop.	Ihlamur	Flower	80039
Urticaceae			
<i>Urtica dioica</i> L.	Isırgan, ısırganotu, kopriga, büyük ısırgan	Herb	80018, 80882, 81041

Table 3. The plants used as spice in Kırklareli province.

Family and species names	Turkish local names	Parts used	Voucher specimen, ISTE
1	2	3	4
Labiatae			
<i>Mentha longifolia</i> (L.) Huds. subsp. <i>typhoides</i> (Briq.) Harley var. <i>typhoides</i>	Yabani nane, dere nanesi	Herb	80975
<i>Origanum vulgare</i> L. subsp. <i>hirtum</i> (Link) Ietsw.	Yer kekiği, kekikotu, keklükotu, keklük	Herb	80913, 80970
<i>O. vulgare</i> L. subsp. <i>vulgare</i>	Kekikotu, keklükotu, keklük	Herb	SK 12
<i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> var. <i>subisophyllus</i> (Borbás) Jalas	Keklikotu, kekikotu, kekik, kekikçayı	Herb	80087, 80871
Lauraceae			
<i>Laurus nobilis</i> L.	Defne	Leaves	80990b
Umbelliferae			
<i>Hippomarathrum cristatum</i> (DC.) Boiss.	Tarhana otu	Herb	80056

Table 4. The plants used as dye in Kırklareli province.

Family & species names	Turkish local names	Parts used	Use application & Voucher specimen, ISTE
1	2	3	4
Aceraceae			
<i>Acer campestre</i> L. subsp. <i>campestre</i>	Sepetlik, Sepetlik ağacı, Akçağaç, Akçağaç	Young shoot	Black color (80057, 80182)
Anacardiaceae			
<i>Cotinus coggyria</i> Scop.	Tetra, Tetre, Teter, Tetra otu	Leaves	Black color (80171, 80888, 80926)
Betulaceae			
<i>Alnus glutinosa</i> (L.) Gaertn. subsp. <i>glutinosa</i>	Kızılağaç, Ela, Boya ağacı	Cortex	Black color (80176, 80915, 81047)
Caprifoliaceae			
<i>Sambucus ebulus</i> L.	Sultanotu, Pıyrıan, Haptovina, Ademotu, Piran, Mülver	Fruit	Black color (80069, 80961, 81051)
Juglandaceae			
<i>Juglans regia</i> L.	Ceviz	Leaves Fruit	Black color (80161, 81048)

Table 4. Continuation.

1	2	3	4
Oleaceae			
<i>Fraxinus ornus</i> L. subsp. <i>ornus</i>	Dişbudak, duşbudak, dışbudak, duştubak, dişturbak	Cortex	It dyes black color (80934)
Rosaceae			
<i>Cydonia oblonga</i> Mill.	Ayva	Leaves	Brown color (80044)
<i>Malus sylvestris</i> Mill. subsp. <i>orientalis</i> (Uglitzk.) Browicz var <i>orientalis</i>	Yabani elma, ekşi elma, yabani ekşi elma, domuz elması	Cortex	Black color (80194, 81058)
<i>Mespilus germanica</i> L.	Muşmula, yabani muşmula	Leaves	Dark brown color (80181, 81062)
<i>Persica vulgaris</i> Mill.	Şeftali	Leaves	Green color (SK 27)
Rubiaceae			
<i>Rubia tinctorum</i> L.	Kökboya, boya kökü, yer boyası, yapışkanotu, broş, gözotu	Roots	Red color (80088, 81083)
Liliaceae			
<i>Allium cepa</i> L.	Soğan	Bulb	Red color (SK 35)

Table 5. The plants used as animal fodder in Kırklareli province.

Family & species names	Turkish local names	Parts used	Voucher specimen, ISTE
1	2	3	4
Fagaceae			
<i>Quercus cerris</i> L. var. <i>austriaca</i> (Willd.) Loudon	Palamut meşesi, sarı meşe	Fruit	80983, 81064
Grammeae			
<i>Avena sativa</i> L.	Yulaf	Fruit	80071
<i>Bromus arvensis</i> L.	Başak otu	Whole plant	80160
Papilionaceae			
<i>Dorycnium pentaphyllum</i> Scop. subsp. <i>herbaceum</i> (Vill.) Rouy	Dirfil, dirfil	Whole plant	80902
<i>Medicago orbicularis</i> (L.) Bart.	Tirfil, tirfilotu	Whole plant	81004
<i>Onobrychis oxyodonta</i> Boiss.	–	Whole plant	80901
<i>Melilotus alba</i> Desr.	–	Whole plant	80978
<i>Trifolium campestre</i> Schreb.	Dirfil, dirfil	Whole plant	81001
<i>T. incarnatum</i> L. var. <i>molinierii</i> (Balb.) DC.	Dirfil, dirfil	Whole plant	80995
<i>T. nigrescens</i> Viv. subsp. <i>petrisavii</i> (Clem.) Holmboe	Dirfil, dirfil	Whole plant	80919
<i>T. repens</i> L. var. <i>macrorrhizum</i> (Boiss.) Boiss.	Tirfil	Whole plant	80980, 80964
<i>Vicia cracca</i> L. subsp. <i>gerardii</i> Gaudin	Gülçina	Whole plant	81012
<i>V. villosa</i> Roth. subsp. <i>dasycarpa</i> (Ten.) Cav.	Fiğotu, fiy, fiğ	Whole plant	81005
Urticaceae			
<i>Urtica dioica</i> L.	Isırgan, ısırganotu, kopriga, büyük ısırgan	Whole plant	Plants parts are cut and used as fodder for cattle to obtain yellow coloured butter (80018, 80882, 81041)

Table 6. Plants used for different purposes in Kırklareli province.

Family & species names	Turkish local names	Parts used	Use application & (Voucher specimen, ISTE)
1	2	3	4
Aceraceae			
<i>Acer campestre</i> L. subsp. <i>campestre</i>	Sepetlik, Sepetlik ağacı, Akçeağaç, Akçaağaç	Wood	Making spoon and making of agricultural tools (80057, 80182)
Buxaceae			
<i>Buxus sempervirens</i> L.	Şimşir	Leaves	As ornaments for brides (80084)

Table 6. Continuation.

1	2	3	4
Cannabaceae			
<i>Humulus lupulus</i> L.	Şerbetçi otu	Inflorescence	Making bread yeast (80998)
Caprifoliaceae			
<i>Sambucus nigra</i> L.	Mürver, Mürver çiçeği, Mülver, Mürver ağacı	Wood	As a toy (80089, 81007)
<i>Sambucus ebulus</i> L.	Sultanotu, Pıyrıan, Haptovina, Mülver Âdemotu, Piran	Leaves	Fleafuge (80069, 80961, 81051)
Compositae			
<i>Centaurea cyanus</i> L.	Taç çiçeği	Flower	As an ornament (80952)
<i>Cichorium intybus</i> L.	Sakız otu, hindiba, sakız çiçeği	Root	As chewing gum (80799, 80822, 80951)
<i>Petasites hybridus</i> (L.) Gaertn.	Kabalak, kalabak otu, konştrakt, kalpak otu, şemsiye otu	Leaves	As an umbrella (80854)
Cornaceae			
<i>Cornus mas</i> L.	Kızılıcak	Wood	Making of agricultural tools (80178)
Corylaceae			
<i>Corylus avellana</i> L. var. <i>avellana</i>	Fındık, yabani fındık	Young shoots	Making basket (81061)
Ericaceae			
<i>Calluna vulgaris</i> (L.) Hull	Piren	Herb	As a broom (81018)
Fagaceae			
<i>Quercus cerris</i> L. var. <i>austriaca</i> (Willd.) Loudon	Palamut meşesi, sarı meşe	Wood	Making barrel, waterbottle (80983, 81064)
Gramineae			
<i>Hordeum vulgare</i> L.	Arpa	Fruit	The fruit from the very first harvest is put into their purses by women or into their tills by tradesmen for abundance (80110)
Hypolepidaceae			
<i>Peridium aquilinum</i> (L.) Kuhn	Parpa, tatlı papra	Herb	As roof isolation In the open markets and fish shops, aerial parts are laid on the counters to put the product on (81053)
Juglandaceae			
<i>Juglans regia</i> L.	Ceviz	Leaves	Protecting against clothes moths (80161, 81048)
Labiatae			
<i>Melisa officinalis</i> L. subsp. <i>officinalis</i>	Oğulotu, arıotu	Herb	It is put into the beehives in order to attract the swarms of bees (81042)
Pinaceae			
<i>Pinus sylvestris</i> L.	Çam, çam akması	Wood	Making barrel, waterbottle, and agricultural tools (80154)
Ranunculaceae			
<i>Clematis vitalba</i> L.	Asma, bağmuk	Young shoots	Making basket (80057a)
Rosaceae			
<i>Prunus spinosa</i> L. subsp. <i>dasyphylla</i> (Schur) Domin	Güvem diken, güvem, veskruş, güvem tiken	Young shoots	Making yoghurt (80030, 81067)
<i>Pyrus elaeagnifolia</i> Pall. subsp. <i>elaegnifolia</i>	Yaban ağılatı, ahlat, yaban armudu	Wood	Making spoon (81060)
<i>Rubus discolor</i> Weihe & Nees	Karamuk, böğürtlen, kapina, böğürtlen diken, özmenek, ahududu	Wood	Making kneading trough (80081)
Salicaceae			
<i>Salix alba</i> L.	Söğüt ağacı, salkımsöğüt, söğüt	Young shoots	Making basket (81010)
<i>Populus tremula</i> L.	Kavak	Wood	Making of agricultural tools (80820a)
Solanaceae			
<i>Datura stramonium</i> L.	Süzgeçotu, taraklıot, patlangıç, dişotu	Fruit	Filtering milk (80083)

Table 6. Continuation.

1	2	3	4
Ulmaceae			
<i>Ulmus minor</i> Mill. subsp. <i>canescens</i> (Melville) Browicz & Ziel.	Karaağaç	Wood	Making of agricultural tools (80177)
Umbelliferae			
<i>Conium maculatum</i> L.	Baldıran, baldırgan, bas	Stem Aerial parts	As a toy (80038, 80994) Aerial parts are sacked and put to the cattle's backs to keep them warm
<i>Heracleum spondylium</i> L. subsp. <i>ternatum</i> (Velen.) Brummitt	Devesil, devesilotu	Root	The roots are burned to keep insects and snakes away (80105)
		Root	The roots broken into small pieces are added into the fodder of animals (goats) to increase milk production
Urticaceae			
<i>Urtica dioica</i> L.	Isırgan, ısırganotu, kopriga, büyük ısırgan	Leaves	As hair care (80018, 80882, 81041)
Vitaceae			
<i>Vitis sylvestris</i> C.C. Gmel.	Yabani asma, kuş üzümü, yabani üzüm	Young shoots, stem	Making basket Sap of stems for hair care (81063)

Table 7. Local names of plants without any uses in Kırklareli province.

Family & species names	Turkish local names	Voucher specimen, ISTE
1	2	3
Amaryllidaceae		
<i>Galanthus nivalis</i> L.	Kardelen, kar çiçeği	
<i>Leucojum aestivum</i> L.	Çingirak, Kardelen	80907
Boraginaceae		
<i>Pulmonaria obscura</i> Dumort.	Menekşe, katran çiçeği	80852
Caryophyllaceae		
<i>Silene conica</i> L.	Yabani karanfil	80881
Compositae		
<i>Silybum marianum</i> (L.) Gaertn.	Kenger	80967
Ericaceae		
<i>Rhododendron ponticum</i> L.	Zelenika, orman gülü	81045
Fumariaceae		
<i>Corydalis wendelboi</i> Lidén subsp. <i>wendelboi</i>	Ayrancıotu, ayran çiçeği	80851
Gramineae		
<i>Bromus</i> sp	Tavşanotu, tavşan bıyığı	80958
Guttiferae		
<i>Hypericum montbretii</i> Spach	Juta papatya	81013
Iridaceae		
<i>Crocus pulchellus</i> Herb.	Güz lalesi, çiğdem	80984
Liliaceae		
<i>Smilax excelsa</i> L.	Gıcır	80925
Malvaceae		
<i>Alcea pallida</i> Waldst. & Kit.	Gülfatma	81088
Nymphaeaceae		
<i>Numphar lutea</i> (L.) Sm.	Penter, dere şalgamı	80927
Orchidaceae		
<i>Orchis purpurea</i> Huds.	Yaban tetrası	80890
Paeomaceae		
<i>Paeonia peregrina</i> Mill.	Kame, İstanbul çiçeği	81036

Table 7. Continuation.

1	2	3
Solanaceae		
<i>Atropa belladonna</i> L.	Dulavratotu	80820b
Umbelliferae		
<i>Eryngium campestre</i> L.	Eşek dikenii	80990
<i>Ferulago confusa</i> Velen.	Günlük otu	80107
<i>Scandix pecten-veneris</i> L.	Papatya	80857

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