

## **Introducing certain ethnobotanical objects in Istanbul University Faculty of Pharmacy, Department of Pharmaceutical Botany**

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**Abstract:** In terms of plant diversity, Turkey is one of the richest countries in the world. In addition to studying the country's rich flora, a number of ethnobotanical studies have recently been conducted in Turkey. The diversity of plant usage in the ethnobotanical studies revealed the multicultural structure of Turkey. Documentation of traditional knowledge through ethnobotanical studies is important for the conservation and utilization of biological resources. As well as documents obtained from ethnobotanical research being important, objects collected during the study are important at the same time. The idea of collecting ethnobotanical objects in Istanbul University Faculty of Pharmacy, Department of Pharmaceutical Botany arose in 2007. Then ethnobotanical objects were collected from around Turkey. They include medicines, foods and ethnographic objects (such as musical instruments, agricultural tools and utensils) as well as plant specimens (including seeds, roots, fruits and oils). This study aims to introduce certain objects found in Istanbul University Faculty of Pharmacy, Department of Pharmaceutical Botany.

**Key words:** Ethnobotany, ISTE, Pharmacy, Istanbul, Turkey.

### **Introduction**

Ethnobotany is the study of the relationship between plants and people: From "ethno" - study of people and "botany" - study of plants (Harsberger, 1895).

The focus of ethnobotany is on how plants have been or are used, managed and perceived in human societies and includes plants used for food, medicine, divination, cosmetics, dyeing, textiles, for building, tools, currency, clothing, rituals, social life and music.

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The evaluation of the data obtained after the ethnobotanical study is as important as the study itself. These data can be knowledge or objects made from plants by the public. So these object should be conserved and they must be passed on to future generations. Ethnobotanical and economic botany collections play important roles in this regard.

Ethnobotanical and economic botany collections build an important connection between biological and cultural diversity, and they are a valuable resource for the study of plant uses past, present and future. These collections contain economically useful plant parts, plant extracts, artifacts and items made of plant objects, artistic representations of economic plants, prepared foods etc.

The world's most famous and oldest collections are at KEW The Economic Botany Collection (EBC), Harvard University The Economic Botany Library of Oakes Ames, Chicago Museum Campus The Timothy C. Plowman Economic Botany Collection. But these collections also comprise the economical objects which are made from plants or plant parts. They contain plant raw objects and artefacts representing all aspects of craft and daily life worldwide, including medicines, textiles, basketry, dyes, gums and resins, foods and woods.

Turkey has extensive floral diversity due to its various climate and different geological zones. Also, Turkey has been inhabited by many civilizations and its people have possessed a rich treasure of traditional botanical knowledge. Ethnobotanical objects could be seen in Ethnographia Museums in Turkey.

### **Material and Method**

Ethnobotanical objects are classified as medicinal, kitchen, cosmetic, outdoor, evil eye bead, toys, musical instruments, ornament and accessory. The photographs of objects and the plant of objects made, name of objects and plant, used plant part, the object number, usage of objects and location of objects can be seen in figures 1-8.

### **Result and Discussion**

The collection of ethnobotanical objects was started when the large

number of ethnobotanical objects firstly had been collected from Kürecik District (Malatya) during the field trips of ‘an ethnobotanical study in Kürecik District’ titled master thesis (Yeşil, 2007). In this process, the most of the objects collected during the field trips of doctorate thesis titled ‘Pharmaceutical Study in Turkish *Paris*, *Polygonatum* and *Veratrum* Genera’. Also the researcher who studies ethnobotany in our department brought objects (Demirci, 2010; Gürdal, 2010; Koçyiğit 2005). About 90 objects were collected from around Turkey. They are exhibited in Istanbul University, Faculty of Pharmacy and Department of Pharmaceutical Botany. These include medicines, foods and ethnografic objects (such as musical instruments, agricultural tools and utensils) as well as plants specimens (including seeds, roots, fruits, oils, gums and samples of wood). Uses range from food, medicine and utensils, to social activities and dying, cosmetics.

Also there are the object number of each of these objects, the local name of objects and plant, botanical name of used plant and plant part, purpose of usage, who brought it to the department, the city and the name of person who made the objects. In medicinal objects, in addition of this information, there are explanations about preparation, ailments treated, therapeutic effect, administration, dosage, duration of the treatment (Fig. 1).



**Figure 1.** Some cupboard of the ethnobotanical objects.

The collected objects which can be exemplified as **medicinal objects** include essential oils, mastics, plant parts (seeds, fruits, roots etc.); as **food objects** include seeds, traditional teas and coffees, some objects made from seeds, fruits and etc.; as **kitchen objects** include baskets, spoons, mixers, garlic crusher, cake molds, traditional coffees and etc.; as **cosmetic objects** include soaps colognes, bark of fruits (for hair dying); as **outdoor usage objects** include taşı, iğ, kirman (both are using for spinning wool), elung and elik (they are using for reaping wheat) etc.; as **musical instruments** include generally brass instruments as ney, sipsi, kaval, tutık and düdük (also tutık and düdük are using for communication in field or forest); as **ornament and accessory objects** include bracelets, necklaces, hairclips, circlet and etc.; as **evil eye bead objects** include seeds, fruits or evil eye bread made from fruits or buds; miscellaneous objects are ascriptions, sticks, straw hat, taws etc.; as **toys** include cars, wrist rockets, spin tops and etc.

Mastics are especially used for stomach disorders, some of them are resin of *Pinus brutia* (Fig. 2A) and *Abies cilicica*, some of them are made from latex of *Gundelia tournefortii*, (Fig. 2B).

Necklaces are made from fruits of *Tordylum opulum* (Fig. 3A) and leaves of *Pinus nigra*. Circlets are made from *Helichrysum* sp. (Fig. 3B), *Anthemis* sp. and other daisies.

*Eugenia caryophyllata* are drilled and attached to a rope like a long necklace and when the bride goes out from her mother's house it is worn around her neck as a protection against the evil eye. When the wedding ceremony is finished the bride takes off the necklace and hangs it on her house wall. This ritual continues when a girl is married in the house. Also people believe that it brings luck to a newly married couple (Fig. 4A).

The capsules of *Peganum harmala* contain the seeds which are frequently strung together to make what is called a Nazarlık, often displayed in houses. These Nazarlık are also hung outside the entrances to keep away evil, and ward off the evil eye (Fig. 4B). The seeds of *Prunus amygdalus* and *Rosa* sp. are used for the same aim and prepared by the same methods.

Çahatara is a traditional Black Sea region toy but there are different types of this toy in other regions (Fig. 5A). Toy car is from Marmara region (Fig. 5B).

Baskets differ from region to region. In the east region people especially make basket from *Triticum* sp.(Fig. 6A), *Salix* sp. and other genera but in the Black Sea region people especially make baskets from *Corylus* sp. (Fig. 6B).

Tutik is an musical instrument and communication object, made from branchies of *Salix* species (Fig. 7A). Ney is one of the traditional musical instruments, made from stem of *Arundo donax* (Fig. 7B).

Some objects are used for the same purpose but their shape, traditional name and the plants or plant parts which are used to make them vary according to region. For example Taşı or Teşi is used for spinning wool in East and South East Anatolia (Fig. 8A). It is known as İğ in the Aegean and some Mediterranean Regions. Also this object is known as Kirman in Center and North Anatolia. However it is known as Parpa in the Black Sea Region. The used plant parts also change from region to region but the basic aim is the same. Firelighters are made from the stem of *Pinus* sp. (Fig. 8B) and *Fomes* sp.

The Devrek district of Zonguldak is celebrated for its sticks which are made from *Cornus mas* and different trees. So are the trade of sticks are made in Devrek district (Fig. 9A).

Elung or Elik are used for collecting wheat, each one worn on a finger and wheat straw is held with the fingers, then with sickle on other hand the straws are cut. Elung or Elik prevents damage to the fingers and also enables more straw to the collected with their long points (Fig. 9B).

The ethnobotanical objects will continue to de collected from around Turkey with new projects which will be supported. Also ethnobotanical knowledge from recent studies in our department as well as in Turkey will follow the systematic collection of objects.

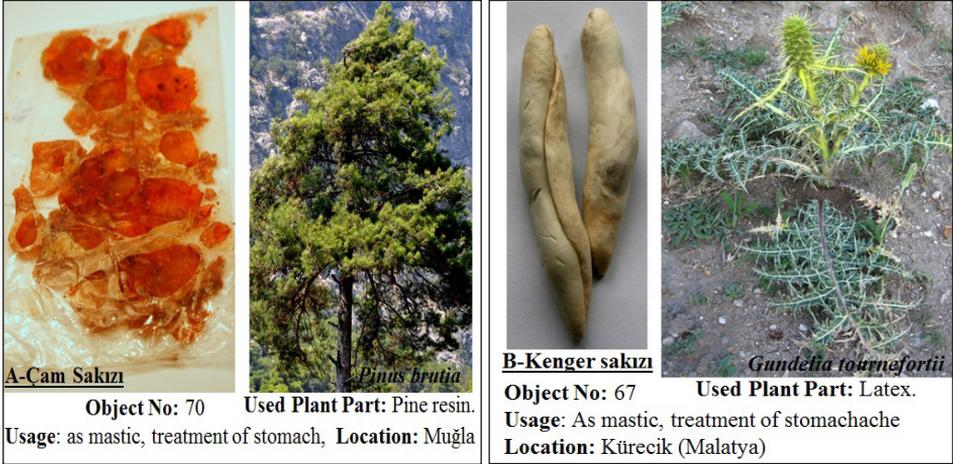


Figure 2. Medicinal Objects

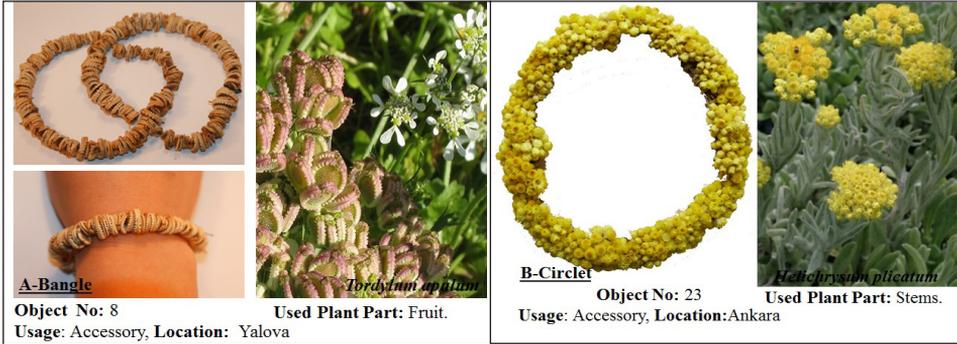


Figure 3. Ornaments and Accessories



Figure 4. Evil Eye Beads

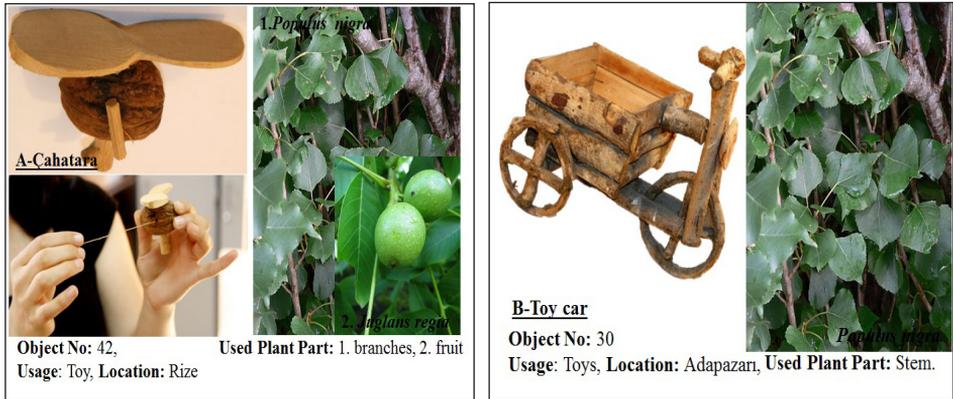


Figure 5. Toys



Figure 6. Kitchen Objects

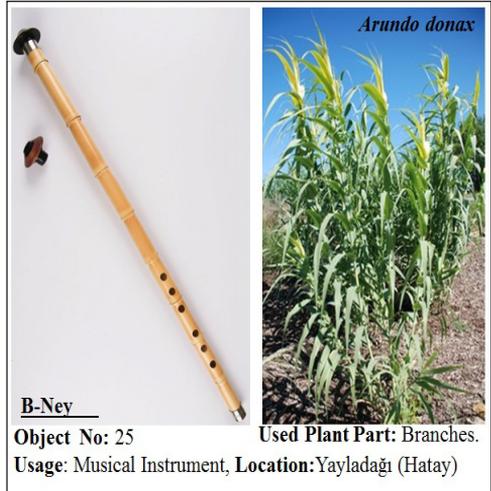


Figure 7. Musical Instruments

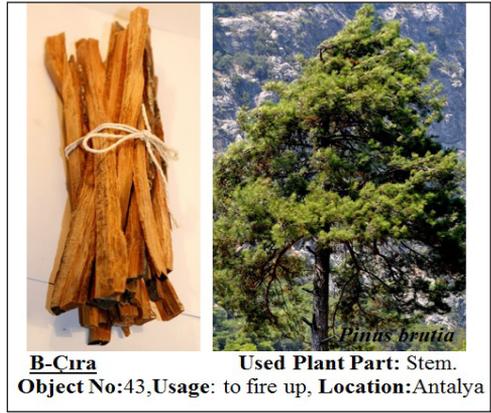
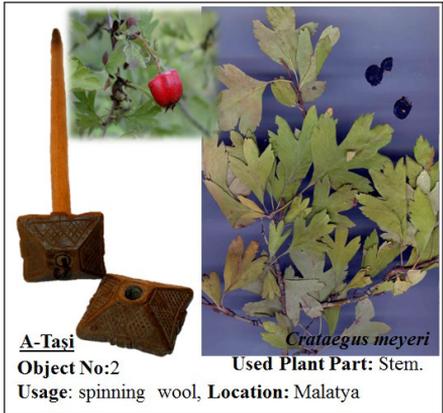
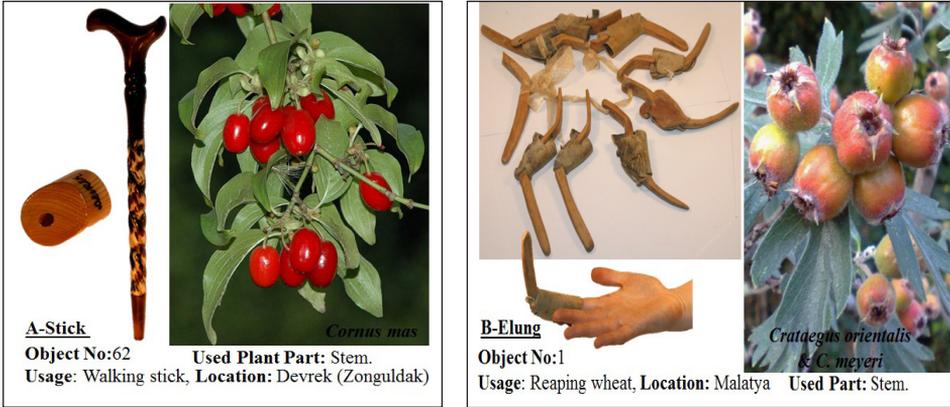


Figure 8. Outdoor Usage Objects



**Figure 9.** Outdoor Usage Objects

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