

A New Record of Monumental Yew Tree In Zonguldak Region

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Abstract: The field is in Davis' A4 square system in Zonguldak province, in 41° 25' 58.5" N, 31° 50' 26.6" E coordinates, in the Euro Siberian Flora (Euxine). This *Taxus* is endangered because of the stand conditions and forestry activities.

Key Words: *Taxus*, Monumental Tree, Zonguldak

Introduction:

The first data belong to monument trees in our country are recorded by Ali Rıza Mardin [2] and these data are about *Platanus* in Sultanahmet and Büyükdere in İstanbul. The first data of *Taxus* belong to *Taxus* whose heights are 19, 21, 22 m and whose diameters are 194, 143, 116 cm in 19th section of Karabük (Yenice)-Kavaklı Region. It is also known that there are also some other records as small groups or individual in Hatay (Amanoslar), Çanakkale (Kazdağları), Denizli (Akdağ), Gümüşhane (Kürtün), Sinop (Ayancık), Düzce, Bolu, Kırklareli (Demirköy) ve Rize (Çamlıhemşin) (Aksoy, 1998; Aksoy, 1982).

Materials and Methods:

As our country has rugged and mountainous areas in general it can be said that there are still a lot of inaccessible places and forests. Therefore, it should be taken into consideration that floristic richness of our country has a number of monument trees waiting to be discovered. During the fieldworks it has been identified that the species which was found as an individual in an old *Fagus* forest is *Taxus baccata* L. The field is in Davis' A4 square system in Zonguldak province, in 41° 25' 58.5" N, 31° 50' 26.6" E coordinates, in the Euro Siberian Flora (Euxine) (Davis, 1965-1985).

Findings:

The height of this individual tree has been identified by using Blume-Leiss altimeter. The diameter of the tree in 1,30 m. height was measured with the sensitivity of cm. Then, the identified circumference values were divided into π (3,14) and the diameter of the tree was founded.

The height of the tree: 17 m

Circumference: 178 cm

Diameter: 57 cm

Top width: 8 m

Altitude: 195 m

Aspect: North West

It is guessed that the tree is 400 years old. Its stem is smooth and healthy. The first branching starts from 170 cm. In the middle and upper parts of the tree there is a density of

branching (Figure 1, 2, 3).



Figure 1: Density of branching



Figure 2: Seed and arillus



Figure 3: Leaf and yellow branch

Other plants found there at 400 square meters area included *Fagus orientalis* Lipsky, *Sorbus torminalis* (L.) Crantz, *Tilia platyphyllos* Scop., *Castanea sativa* Mill., *Laurus nobilis* L., *Rhododendron ponticum* L., *Hedera helix* L. and *Pteridium aquilinum* (L.) Kuhn. Minimal Monumental Point (MMP) is 40 for *Taxus* (Genç & Güner, 2001). The MMP for this recorded tree is shown in the Table 1.

Table 1. Minimal Monumental Point (MMP) for *Taxus* Zonguldak

	MMP	MMP
Height	17 m	13 p
Diameter	57 cm	6 p
Top width	8 m	2 p
Age	400	12 p
Location	Forest	2
Other Positive Points	Possible to protect, healthy	10 + 6 p
Total MMP		51 p

Conclusion and Discussion:

Today, there is a pressure on forest areas and it has a number of negative impacts. Especially in the production, the minor species are not taken into consideration. Thus, it is caused damage to thousands hectares of forest each year in the production of wood for the need for industrial raw materials. This recorded *Taxus* is endangered because of the stand conditions and forestry activities. According to MMP, this tree should be registered as a "Monumental Tree" as it has smooth, well rounded and healthy stem. So, it is suggested that it should be registered officially as a monumental tree by taking in situ conservation precautions.

References:

1. Aksoy, H. (1982). Eiben-und Eichen-Urwaldreste im Forstamt Yenice (Turkei). IUFRO-Gruppe Urwald-Symposium Wien, 149-163.
2. Aksoy, N. (1998). Monumental Trees of Turkey 16: Koca Arduç. The Karaca Arbor. Mag. 4(4): 175-178.
3. Davis, P.H. (1965-1985). Flora of Turkey and East Aegean Islands. vols. 1-9, Edinburgh University Press, Edinburgh.
4. Eliçin, G. (1967). Dünyanın Muhtelif Bölgelerinde Yetişen Bazı Tarihi ve Yaşlı Ağaçlar. İst. Üniv. Orman Fak. Derg., Seri B, 1: 136-142.

5. Genç, M. & Güner, S.T. (2001). A New method to select Monumental Tree Among the Forest Tree Species of Turkey: An Application, Proceedings International Conference Forest Research: a challenge for an integrated European approach, 27 August-1 September 2001, Thessaloniki, Greece.