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A New Record for Flora of Turkey; *Artemisia oliveriana* J.Gay ex Besser (Asteraceae)

Türkiye Florası için Yeni Bir Tür Kaydı; *Artemisia oliveriana* J.Gay ex Besser (Asteraceae)

Research Article

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ABSTRACT

Artemisia oliveriana (Asteraceae) is described as a new record to the Flora of Turkey (C9, Hakkâri). Detailed morphological description, photos, distribution map of this new record has been given.

Key Words

New record, *Artemisia oliveriana*, Hakkâri.

ÖZET

Artemisia oliveriana (Asteraceae) türü Türkiye Florası için ilk kez (C9, Hakkâri) kaydedilmiştir. Yani kaydın ayrıntılı morfolojik betimi, fotoğrafları ve yayılış haritası verilmiştir.

Anahtar Kelimeler

Yeni kayıt, *Artemisia oliveriana*, Hakkâri.

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INTRODUCTION

The genus *Artemisia* L., which comprises more than 500 species, is one of the largest genera of the family Asteraceae [1-4]. Although the genus *Artemisia* is mainly distributed in the northern hemisphere, the genus is represented by few species in southern hemisphere. According to the investigation of [5] Asia is one of the important gene centres of the genus.

Medical usage; foodstuff and allergenic properties of the genus got genus study well [6,7]. Also having polyploidy make the genus interesting for the cytogenetic and karyological studies.

The studies, such as cytogenetic and karyological studies which are made by [8-13] about genus *Artemisia* showed that genus divided into 5 subgenera as *Artemisia* Less., *Absinthium* (Mill.) Less., *Dracunculus* (Bess.) Rydb., *Seriphidium* (Bess.) Rouy., and *Tridentatae* (Rydberg) McArthur but lack of molecular studies make subgeneric classification of the genus difficult [14].

In Turkey, genus is represented by 26 taxa into 4 subgenera [15,16]. But there is a debate about some Turkish taxa such as *Artemisia santonicum* L. subsp. *patens* (Neilr.) K.M.Perss. [17]. Also a new species, *Artemisia bashkalensis* Kurşat & Civelek, has recorded as a new species to the Turkish flora recently [18].

MATERIALS AND METHODS

Artemisia oliveriana J.Gay ex Besser, the material of this study, was collected in Berçelan Plateau (Figure 1), Hakkâri in October 2014. According to the description of Flora of Turkey and the East Aegean Islands [19], Flora of Turkey and the East Aegean Islands (Supplement) [20] it was concluded that collected materials were new record for Turkey flora. Detailed investigation of literatures [16,21] showed that collected materials have been described as *Artemisia oliveriana* from Flora Iranica. Collected materials were deposited at the Herbarium of Yüzüncü Yıl University Science Faculty (VANF).

Description

Artemisia oliveriana J.Gay ex Besser, Prodr. 6: 101 (1837). (Figure 2).

Syn.: *A. serotina* Bunge, Beitr. Fl. Russi. 165 (1852), et in Mem. Sav. Etrang. Acad. Petersb. 7: 341 (1854). *A. sogdiana* Bunge, l.c. 167 et l.c. 343: *A. maracandica* Bunge, l.c. 169, et l.c. 345. *A. fragrans* Willd. var. *maracandica* (Bunge) Bmss., Fl. Or. 366 (1875). *A. Herba-alba* Asso var. *densiflora* Bmss., l.c. 365, p.p. *A. flavifolia* Gilli, Feddes Repert. 68: 94 (1963). Icon.: Tab. 198.

Typus: Inter Teheran et Ispahan, G.A. OLIVIER, G-BOISSI, P!

Plant suffruticose, 40-60 (-80) high, arachnoid- tomentose; glabrous or subglabrous at flowering time. Caudex woody with many heads. Stem with flowers somewhat erect, 30-50 (-60) cm long, brownish-yellow or greenish-yellow, branched from base or above middle. Leaf on young sterile shoots long petiolate on upper part of stem, 40-50 mm. long, lamina oblong or ovate, bipinnatisect, lacinate linear, shortly acuminate, 2-4 mm. long, cauline leaves in middle subsessile, oblong, base auriculate dissected, upper leaves linear, entire. Panicle broadly pyramidal, branches 8-20 (-35) cm. long, spreading or oblong erected. Capitulum sessile or short pedicellate, oblong or narrowly ovate, 3-4 mm. long, scattered or remote in narrowly branched inflorescence. Involucral bracts imbricate, outer bracts small, ovate, dorsal surface dense puberulate, inner bracts long, oblong, somewhat glabrous, margin scabrid.

Examined Material

Turkey. C9 Hakkâri; from Karadağ Mountains to Berçelan Plateau, Step, near road, 1927 m, 37°35' 464' N, 043°43' 883' E, 05.10.09.2014, 04.10.2014 M. Firat 31325, VANF.

Habitat

Step, near road.

Phenology

Flowering and fruiting times from October-November .

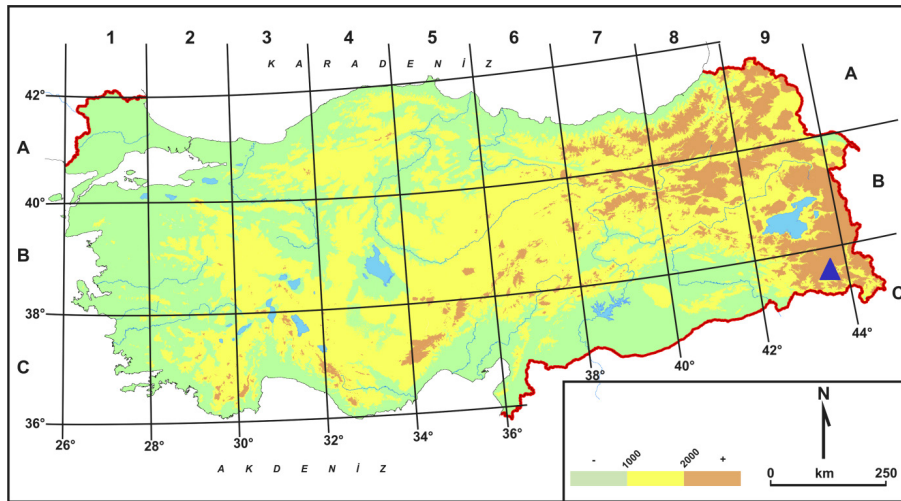


Figure 1. Geographical distribution of *Artemisia oliveriana* (Δ) in Turkey.



Figure 2. *Artemisia oliveriana* A. habit and habitat, B-C. General view of the sinflorescence, D. Cauline leaves.

Distribution in Turkey

Hakkâri.

General Distribution

Persia, Turcomania, Afghanistan, Pakistan, Asia centralis.

Vernacular Name

In Hakkâri province, indigenous people use the name "Hewşan" for *Artemisia* [22].

RESULTS AND DISCUSSION

In our country, the genus *Artemisia* L. is represented by 22 species, 1 subspecies and 2 varieties. One of these 25 taxa is endemic. The number of taxa in our country has risen to 26 with this new record. Thus, this has contributed to both the region of Hakkari where limited information is known about its flora in private and the Flora of Turkey.

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References

1. Y. R. Ling, The Old World *Seriphidium* (Compositae), Bull Bot Res Harbin, 11 (1991) 1-40.
2. Y.R. Ling, The Old World *Artemisia* (Compositae), Bulletin of Botanical Research Harbin, 12 (1991) 1-10.
3. J. Vallès, S. Šiljak-Yakovlev, Cytogenetic studies in the genus *Artemisia* L. (Asteraceae): fluorochrome-banded karyotypes of five taxa, including the Iberian endemic species *Artemisia barrelieri* Besser, Canadian Journal of Botany, 75 (1997) 595-606.
4. V.A. Funk, A. Susana, T.F. Stuessy, H.E., Robinson Classification of Compositae, In: V. A. Funk, A. Susana, T.F. Stuessy, R.J. Bayer (eds.), Systematics, Evolution and Biogeography of the Compositae, Vienna: International Association for Plant Taxonomy, (2009), 171-189.
5. J. Vallès, T. Garnatje, S. Garcia, M. Sanz, A. A. Korobkov, Chromosome numbers in the tribes Anthemideae and Inuleae (Asteraceae), Bot. Journal of the Linnean Society, 148 (2005) 77- 85.
6. A. Chehregani, M. Atri, A. Yousefi, F. Jalali Polyploidy variation in some species of the genus *Artemisia* L. (Asteraceae) in Iran, Caryologia, 63 (2010) 168-175.
7. M.Q. Hayat, M. Ashraf, M.A. Khan, G. Yasmin, N. Shaheen, S. Jabeen, Palynological study of the genus *Artemisia* (Asteraceae) and its systematics implications, Pakistan Journal of Botany, 42 (2010) 751-763.
8. T. Kawatani, T. Ohno, Chromosome numbers in *Artemisia*, Bulletin National Institute of Hygienic Sciences, 8 (1964) 183-193.
9. X.J. Vallès, Aportación al conocimiento citotaxanómico de ocho táxones Ibéricos del género *Artemisia* L. (Asteraceae, Anthemideae), Anales Jardín Botánico de Madrid, 44 (1987) 79-96.
10. E. Gabriellian, X.J. Vallès New data about the genus *Artemisia* L. (Asteraceae) in Armenia, Willdenowia, 26 (1996) 245-250.
11. M. Torrell, N. Garcia-Jacas, A. Susana, J.Vallès, Infrageneric phylogeny of the genus *Artemisia* L. (Asteraceae, Anthemideae) based on nucleotide sequences of nuclear ribosomal DNA internal transcribed spacers (ITS), Taxon, 48 (1999) 721-736.
12. M. Torrell, J. Vallès, Genome size in 21 *Artemisia* L. species (Asteraceae, Anthemideae), systematic, evolutionary, and ecological implications, Genome, 44 (2001) 231-238.
13. M. Torrell, N. Garcia-Jacas, J. Vallès, M. Torrell, V. Mozaffarian, E. Gabriellian, New or rare chromosome counts in the genus *Artemisia* L. (Asteraceae, Anthemideae) from Armenia and Iran, Botanical Journal of the Linnean Society, 135 (2001) 51-60.
14. J. Valles, M. Torrell, T. Garnatje, N. Garcia-Jacas, R. Vilatersana, A. Susanna, The genus *Artemisia* and its allies, phylogeny of the subtribe Artemisiinae (Asteraceae, Anthemideae) based on nucleotide sequences of nuclear ribosomal DNA internal transcribed spacers (ITS), Plant Biology, 5 (2003) 274-284.
15. M. Kurşat, Ş. Civelek, İ. Türkoğlu, S. Tabur, *Artemisia sieberi* Bess. subsp. *sieberi* A new record for Turkey and a delete record for Turkey *Artemisia herba-alba* Asso. (Asteraceae), Pakistan J. Bot., 43 (2011) 1819-1821.
16. M. Kurşat M, *Artemisia*. In: A. Güner, S. Aslan, T. Ekim, M. Vural, M. T. Babaç, (eds.) Türkiye Bitkileri Listesi (Damarlı Bitkiler). İstanbul, Türkiye, Nezahat Gökyiğit Botanik Bahçesi ve Flora Araştırmaları Derneği Yayını, 2012.
17. M. Kurşat, Ş. Civelek, İ. Türkoğlu, S. Tabur, A new subspecies record for the flora of Turkey: *Artemisia santonicum* L. subsp. *patens* (Neilr.) K.M.Perss. (Asteraceae), Turk. J. Bot., 35 (2011) 89.
18. M. Kurşat, Ş. Civelek, İ. Türkoğlu, S. Tabur, N. Gür, A new species of subgenus *Seriphidium* of *Artemisia* L. (Asteraceae) from Turkey, Turkish Journal of Botany, 39 (2015) 88-95.
19. J. Cullen, *Artemisia* L. In: P. H. Davis(ed.). Flora of Turkey and the East Aegean Islands, Edinburgh Vol. 5, Edinburgh Univ Press, (1975) 311-324.
20. A. Güner, N. Özhatay, T. Ekim, K.H.C. Başer, Flora of Turkey and the East Aegean Islands, vol. 11. Edinburgh University, Press, Edinburgh, (2000) 197-210.
21. D. Podlech, Flora of Iranica, In: Rechinger, K.H., (Ed.), Austria, (1986) 159-224.
22. M. Firat, Ferhenga Navên Riwekên Bi Kurdî/Kürtçe Bitki Adları Sözlüğü/Dictionary of Plant Names in Kurdish, Kalkan Ofset, Ankara, (2013) 652.