

ISSN 1300-2953

OT
SİSTEMATİK BOTANİK DERGİSİ
THE HERB JOURNAL OF SYSTEMATIC BOTANY



CİLT
25
VOLUME

SAYI
2
NUMBER

YIL
2018
YEAR

Yazışma Adresi (Correspondance Address):

Prof. Dr. Şinasi YILDIRIMLI

P.K. 663 - 06444 Mithatpaşa - Ankara - Türkiye

İş tel (Office tel) : 90 312 297 80 04 - 0312 780 50 04

İş faks (Office fax) : 90 312 299 20 28

Cep tel (GSM) : 0 505 433 02 09

e-mail : ot@hacettepe.edu.tr - otdergisi.yldrml@gmail.com

Posta Çek. No : 1001 167

Yapı Kredi Bankası (Beytepe Şb.) : TR80 0006 7010 0000 0072 4965 55

Ot Sistematik Botanik Dergisi

25, 2, 2018 cildinde yayınlanan yeni üyeler, aktarım ve konumlar
New taxa, combination and status published in volume 25, 2, 2018

<i>Alliaceae</i> :	Allium ankarens e Yıld., sp. nov.	3
<i>Asteraceae</i> :	Centaurea goerkii Yıld., sp. nov.	5
<i>Boraginaceae</i> : ...	Paracaryum leventshikii Yıld., sp. nov.	8
<i>Brassicaceae</i> :	Erysimum erolii Yıld., sp. nov.	11
	Iberis gypsicola Yıld., sp. nov.	13
<i>Lamiaceae</i> :	Marrubium lanatum Akgül, sp. nov.	25
<i>Linaceae</i> :	Linum platyphyllum (P.H.Davis) Yıld.,	
	comb. & stat. nov.	17
	Linum platyphyllum (P.H.Davis) Yıld.,	
	subsp. gvensenii Yıld., subsp. nov.	17
<i>Rubiaceae</i> :	Galium karliovaense Yıld. & Kılıç, sp. nov.	33
	Galium sancakense Yıld. & Kılıç, sp. nov.	36

DÜZELTME (CORRIGENDUM)

OT Sistematik Botanik Dergisi
24, 2, 1- 8, 2017-ISSN 1300-2953

A new remarkably *Silene* L. (*Caryophyllaceae*)
from Bingöl province, Turkey

Şinasi YILDIRIMLI* & Ömer KILIÇ**

*University of Hacettepe, Science of Faculty, Department of Biology
Division of Botany 06532 Beytepe-Ankara-Türkiye ot@hacettepe.edu.tr

**Technical Science Vocational High School, Bingöl University, Bingöl
12000, Turkey

Üstte adı geçen makale yayınlandıktan sonra dikkatimizi çeken Şekil
1'deki dizgici hatasının aşağıdaki gibi düzeltilmesini rica ederiz.

We would like to be corrected the following typographer error brought to
our attention after publication of the above paper. The correct new figure
1 is as follows:



Figure 1. *Silene magenta*, habitus, Ş. Yıldırımli 43367 & Ö. Kılıç (holotype)

**A new species of *Marrubium* L. (*Lamiaceae*),
M. lanatum Akgül from Niğde, Turkey**

Gençay AKGÜL

Hacı Bektaş Veli Nevşehir University
Faculty of Arts and Sciences Department of Biology 50300 Nevşehir-Türkiye
(e-mail:akgul@nevsehir.edu.tr)

Abstract

Marrubium lanatum Akgül (*Lamiaceae*) is described from Niğde, Turkey. The new species is distinguished from *M. trachyticum* by its some morphological features such as whole plant surfaces densely greenish-white lanate, margins of leaves crenate to serrate, bracteoles filiform, calyx tube 3.5-4.5 mm, corolla tube glabrous inside. New species' description, comparison table, IUCN category, ecology, distribution, photo and illustration, and also the discussion is provided.

Key Words: *Marrubium lanatum*, *Lamiaceae*, new species, Niğde, Turkey

**Türkiye'nin Niğde ilinden *Marrubium* L. (*Lamiaceae*) cinsine ilgin
yeni bir tür, *M. lanatum* Akgül**

Özet

Türkiye'nin Niğde ilinden *Marrubium* L. (*Lamiaceae*) cinsine ilgin yeni bir tür, *M. lanatum* Akgül betimlenmiştir. Yeni tür, tüm bitki

yüzeyinin yoğun yeşilimsi-beyaz yünsü tüylü, yaprak kıyılarının oymalı ve testere dişli, bırahteyollerin ipliksi, çanak yaprak túbünün 3.5-4.5 mm, taç yaprak túbünün içinin tüsüz olması gibi morfolojik özellikleriyle *M. trachyticum* Boiss.'dan ayrılmaktadır. Yeni türün betimi, karşılaştırma tablosu, IUCN kategorisi, ekolojisi, dağılımı, arazi ve çizim fotoğrafları ile birlikte tartışması da verilmiştir.

Bulduru sözcükler: *Marrubium lanatum*, *Lamiaceae*, yeni tür, Niğde, Türkiye

Introduction

Marrubium L. is native to temperate Eurasia, Europe, the Middle East and the Mediterranean region (1). The genus *Marrubium* has c. 50 species in the world wide. The genus species are mostly distributed in Anatolia -Turanian phytogeographic region especially in Anatolia (25 taxa, nearly 50 %) (2-7). Most of them are endemic to Turkey (16 taxa, 64 %). The data show that Turkey is a major centre of diversity for *Marrubium* (8-13). After 2006, some collections were made by the author in Niğde province. It is know as an interesting area in terms of plant diversity, so a lot of floristic records have been given by researches in the area (14, 15). The new plant materials were collected near Azatlı, Niğde in 2012. The specimens were pressed and dried using standard techniques for the examination (16). They have been kept at ANK Herbarium. All plants were examined in detailed. The morphological characters were measured carefully using milimetric scale for example leaves size, flowers length (bracteoles, calyx, calyx teeth and corolla tube) and nutlets size. Field observation and careful examination on more materials collected from various regions of Turkey after 2000, show that it is a distinct new species. To describe this specimens, floras and literatures were given at above and the new specimens were compared with Turkish University herbarium materials (ANK, GAZI, AUEF, ISTE, ISTF). In addition the author observed the duplicates of Turkish *Marrubium* specimens obtained from Herbaria of E, BM and W. *M. lanatum* is similar to *M. trachyticum* which grows in central Anatolia. But there are many differences between two species on morphologic characters such as whole plant surfaces densely greenish-white lanate, margins of leaves crenate to serrate, bracteoles filiform, calyx tube 3.5-4.5 mm, corolla tube glabrous inside and the other differences given in Table 1.

Taxonomic Treatment

Marrubium lanatum Akgül, **sp. nov.**, figure 1-3.

Perennial, erect, usually unbranched in inflorescence regions, woody at base. Sterile shoots several, 3-5 cm long. Fertile stems 20-40 cm long, quadrangular, whole stems densely greenish-white wooly. Petioles 5-10(-15) mm. Steril shoots leaves 7-10 x 5-7 mm, broadly elliptic to ovate, densely whitish wooly, rounded at apex, crenate to serrate at margins. Fertile stems leaves 4-6 pairs, 10-25 x 8-18 mm, elliptic to obovate, both surface densely woolly, rounded at apex, cuneate at base, crenate to serrate at margins; upper and lower surface densely greyish-white lanate. Lower floral leaves elliptic to ovate, 15-25 x 10-15 mm, upper and lower surface lanate, greenish-white, slightly twice as long as verticillasters. Verticillasters 7-15 x 5-10 mm, hemispherical, 10-20(-25) flowered, slightly densely lanate. Bracteoles 2-4 mm, filiform, not spiny at apex, usually shorter than calyx tube; densely stellate-lanate hairy. Calyx tube 3.5-4.5 mm long, greyish and whitish-grey and densely woolly; tube densely hairy outside, with tufts of long hairs inside at mouth; calyx teeth 1.5-2 mm long, filiform, equal, not spiny at apex, densely lanate hairy. Corolla 4-5 mm long, tube yellowish white, exerted from calyx tube, stellate-pubescent outside, glabrous inside; upper lip slightly concave and lightly bifid; middle lobe of lower lip 1.5 x 2 mm, ovate, toothed; lateral lobes equal to middle lobes; stilus 3.5 mm, lobed. Nutlets 4, tuberculate, brownish.

Type. Turkey. C5 NİĞDE: Centrum, Near Azathı village, rocky slopes, 1600-1650 m, 15.07.2012, G. Akgül 2418 (holo. ANK; iso. Yıldırımli Otluk'u).

Close to *Marrubium trachyticum* Boiss. but indumentum lanate (not pilose); leaves ovate-elliptic (not oblanceolate), margins crenate to serrate (not serrate); calyx 3.5-4.5 mm (not 5-5.5 mm); corolla 4-5 mm (not 5-5.5 mm), inside glabrous (not pilose).

Endemic. Anatolia-Turanian element.

Ecology and phenology: Flowering time in June, fruiting time in August. It grows on rocky slopes with *Linum mucronatum* Bertol, *Hypericum lydiium*

Boiss., *Astragalus hirsutus* Vahl, *A. xylobasis* Freyn & Bornm., *Phlomis linearis* Boiss. & Balansa; between 1600–1650 metres.

Conservation Status: *M. lanatum* is known only one locality from Azatlı-Niğde (Fig. 2). The population is small, being represented by about 10 individuals which occupy an area of about 100 m². This populations seriously threatened by human activities because it is located close to residential area. According to the criterion “D”, the species is considered to be in the CR “(Critically endangered)”, for its rare distribution (IUCN 2014).

Etymology: The specific epithet is given due to the fact that the whole surface of the plant is very dense woolly.

Table 1. Morphological comparison of *M. lanatum* and *M. trachyticum*

Characters	<i>M. lanatum</i>	<i>M. trachyticum</i>
Stems	Whole surface densely greenish-white woolly	Densely greyish lanate at nodes and based or pilose
Cauline leaves	10-25 x 8-18	13-19 x 10-14
Margine of cauline leaves	Crenate to serrate	Serrate
Bracteoles	Filiform	Subulate
Calx tube	3,5-4,5 mm	5-5,5 mm
Calyx teeth	not spiny at apex	spiny at apex
Corolla color	Lightly yellowish-white	White
Corolla	4-5 mm long, exerted from calyx tube, glabrous inside	5-5.5 mm long, slightly exerted from calyx tube, simple hairy inside
Nutlets	Lanceolate, brownish	Lanceolate-oblong, dark brown or reddish
Habitat	Rocky slopes	Slopes, fields

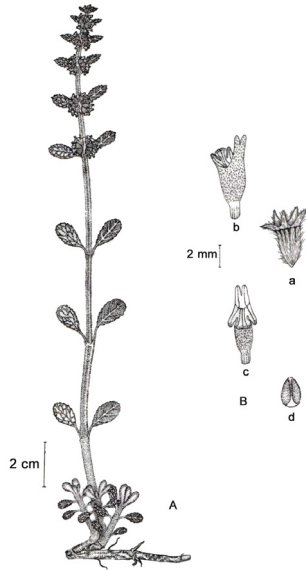


Figure 1. *Marrubium lanatum* Akgül (Akgül 2418),
A. Habitus B. Flower (a. calyx b, c. corolla, d. nutlet)



Figure 2. *Marrubium lanatum* Akgül, in holotype habitat,
A. Habitus and habitat B. Veticillasters

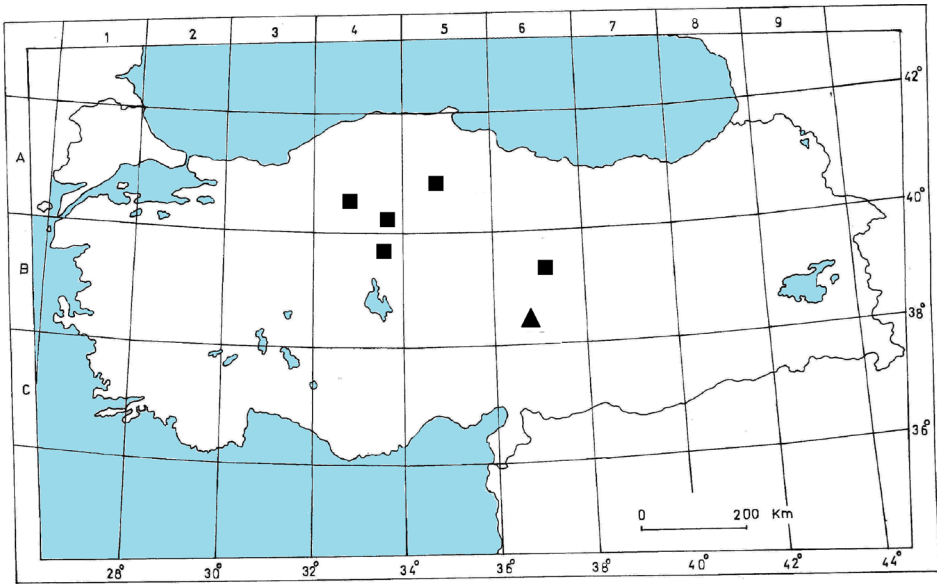


Figure 3. Distribution of Δ *Marrubium lanatum* Akgül Δ
and \square *M. trachyticum* Boiss. \square

Result and Discussion

M. lanatum is similar to *M. trachyticum* and currently known only one locality in near Azatlı, Niğde. There are areas such as Hasan dağı, Melendiz dağı, Aladağlar and Bolkar dağları which show floristic richness within the borders of Niğde. Many botanists were given numerous floristic records from this area (2, 17). The end of the distribution limit of it in the South Anatolia is Nevşehir province (17). The new species differs from *M. trachyticum* in that it has densely woolly hairs on the all the morphological structures, leaves 10-25 x 8-18 (not 13-19 x 10-14), leaves margins crenate to serrate (not only crenate or serrate), bracteoles filiform (not subulate), calyx tube 3.5-4.5 mm (not 5-5.5 mm), corolla tube glabrous inside (not simple hairy inside). A comparison of the morphological characters of the two species is shown in Table 1. *M. lanatum* is localised on only rocky slopes at 1600-1650 meters near Niğde whereas *M. trachyticum* is growing on slopes and fields at 900-1200 metres in Central Anatolia. And also, flowering time of *M. lanatum* is after than *M. trachyticum* (in July). In addition, the IUCN category of the new species is given as CR because it is known from one locality and it is close to the residential area (18).

Acknowledgements

The author would like to thank to curators of the Herbaria of E, BM, W and ANK, GAZI, AUEF, ISTE, ISTF, who allowed me to study their *Marrubium* specimens.

References

1. HEDGE I.C., **A Global Survey the Biogeography of the Labiatae**, Royal Botanic Gardens, Kew, 1992.
2. CULLEN J., *Marrubium* L. in Davis P.H. (Ed), **Flora of Turkey and the East Aegean Islands**, Edinburgh Univ. Press, 7, 165-178, 1982.
3. BOISSIER P.E., **Flora Orientalis**, Geneva, 1867-1888.
4. TUTIN G.T., HEYWOOD V.H., **Flora Europaea**, vols. 1-5, Cambridge Univ. Press, 1964-1980.
5. TOWSEND C.C., GUEST E., **Flora of Iraq**, vols. 1-3, Baghdad, 1968.
6. AHVAZI M., JAMZAD Z., BALALI G.R., SAEIDI H., Trichome micromorphology in *Marrubium* L. (*Lamiaceae*) in Iran and the role of environmental factors on variation, **Iran. J. Bot.**, 22, 1, 2016.
7. KOMAROV V.L., et al., **Flora of USSR**, vol. XIV, 155-165, 1964.
8. AYTAÇ Z., AKGÜL G., EKİCİ M., A new species of *Marrubium* (*Lamiaceae*) from Central Anatolia, Turkey, **Turk J Bot.**, 36, 443-449, 2012.
9. AKGÜL G., SELVİ B., A new species of *Marrubium* L. (*Lamiaceae*) from southwestern Anatolia, Turkey, **Ot Sistematiik Botanik Dergisi**, 21, 2, 15-22, 2014.
10. AKGÜL G., KETENOĞLU O., DOĞAN M., A new species of *Marrubium* L. (*Lamiaceae*) from Turkey, **Ot Sistematiik Botanik Dergisi**, 24, 2, 37-46, 2017.
11. AKGÜL G., KETENOĞLU O., A new subspecies for flora of Turkey, *Marrubium cephalanthum* Boiss. & Noe subsp. *montanum* Akgül & Ketenoglu (*Lamiaceae*), **Ot Sistematiik Botanik Dergisi**, 21, 1, 21-28, 2014.
12. AKGÜL G., vd., Pollen and seed morphology of genus *Marrubium* (*Lamiaceae*) in Turkey, **Annales Botanici Fennici**, 45, 1-10, 2008.
13. AKGÜL G., *Marrubium vulcanicum* (*Lamiaceae*), a topotype from northeastern Anatolia, Turkey, **Acta Biologica Turcica**, 29, 2, 38-42, 2016.

14. YILDIRIMLI Ş., Some new taxa, records and taxonomic treatments from Turkey, **Ot Sistematiik Botanik Dergisi**, 17, 2, 1-114, 2010.
15. YILDIRIMLI Ş., The genus *Erysimum* L. (*Brassicaceae*) in Turkey, some new taxa, records, a synopsis and a key, **Ot Sistematiik Botanik Dergisi**, 15, 2, 1-80, 2008.
16. DAVIS P.H., HEYWOOD V.H., **Principle of Angiosperm taxonomy**, Huntigton, New York,.
17. ÖZBEK B., YILDIRIMLI Ş., Flora of Hırka dađı (Gülşehir-Hacıbektaş-Nevşehir), **Ot Sistematiik Botanik Dergisi**, 16, 2, 53-78, 2009.
18. IUCN, **Red List Categories and Criteria, Version 11**, Gland, Switzerland: IUCN Standards and Petitions Subcommittee, 2014.

DERGİNİN KAPSAMI VE YAZIM KURALLARI

“OT Sistematik Botanik Dergisinde” çiçeksiz ve çiçekli bitkilerle ilgili yayınlana-
bilecek makale çeşitleri şunlardır: Geniş anlamda sistematik botanik, bitki coğrafyası,
ekonomik botanik; monograflar, revizyonlar, fuloralar, sistematik anatomi, palinoloji,
sitoloji, bitki kimyası; elde edilen bulgu ve sonuçların ivedilikle duyurulması bakımın-
dan bilim dünyası ve Türkiye için yeni türler; yerel bitki adları ve kullanımları; yeni ge-
leşmeleri, bilgileri, bulguları ve düşünceleri içeren derlemeler.

Başta Türkçe olmak üzere İngilizce, Fransızca, Almanca, İspanyolca, Portekizce,
İtalyanca ve Latince dillerinden birinde yazılan makaleler kabul edilebilir.

Makale taslakları eğer gerekliyse aşağıdaki sıraya göre hazırlanmalıdır; Başlık,
özet, bulduru sözcükleri, giriş, materyal ve metot, tartışma ve sonuç, teşekkür (destek
veren kuruluşlar dahil), kaynakça. Makale taslağının ilk sayfası şöyle olmalıdır: Makale
başlığı, yazar adı, adresi. Örnek: *Goerkemia* Yıldırımli (*Brassicaceae*), a new genus to
science from Turkey, Şinasi YILDIRIMLI, Hacettepe Üniversitesi, Fen Fakültesi,

Biyoloji Bölümü, Botanik Anabilim Dalı, 06800 Beytepe-Ankara-Türkiye,
ot@hacettepe.edu.tr

Türkçe yazılan bir makalede Türkçe özet ile birlikte bir de İngilizce özet verilme-
lidir. Makaleler Türkçe’den başka bir dilde yazılıyorsa o yazılan dilde bir özet ile İngi-
lizce ve Türkler için Türkçe özet de verilmelidir. Kaynaklar metin içinde parantez ara-
sında geçiş sırasına göre numaralandırılarak verilmelidir örneğin (6), (6, 8), (6-10). Kay-
nak yazımına örnekler: YILDIRIMLI, Ş., The chorology of the Turkish species of Aste-
raceae family, **OT Sistematik Botanik Dergisi**, 6, 2, 75-123, 1999; BAYTOP, A., **İstan-
bul Üniversitesi Eczacılık Fakültesi Herbariumundaki Türkiye Bitkileri I, Pteridophyta,
Gymnospermae, Dicotyledones**, TÜBİTAK-TBAG 493 No’lu proje, İstanbul, 1984;
HEDGE I.C., *Onobrychis* Adans. in P.H. Davis (Ed.) “**Flora of Turkey and the East Ae-
gean Islands**”, vol. 3, pp. 560-589, Edinburgh University Press, Edinburgh 1970. Şekil-
ler, haritalar, girafikler ve diyagramlar çini mürekkeple aydıngere çizilmelidir. Metin
içinde geçen her türlü şekil girafik, çizelge, fotoğraf ilgili yere yerleştirilmelidir. Her
şeklin yanında küçültme veya büyültme oranları belirtilmelidir. Üst düzey her türlü üye
de dahil olmak üzere Latince bitki adları eğri yazılmalıdır.

Yayına kabul edilmeden önceki makale taslağı ve yayına kabul edilen makale elek-
tronik posta yolu ile ot@hacettepe.edu.tr’ye gönderilmelidir.

Editör dil bakımından Türkçe’nin gelişmesi yönünde sözcükler üzerinde değişik-
likler yapabilir. Bu değişiklikler yazarlar tarafından kabul edilmiş sayılır. Örneğin Türk-
çe yazıldığı gibi okunan, okunduğu gibi yazılan bir dil olduğundan yazarların bu kurala
uyması önerilir.

Ot Sistematik Botanik Dergisinde yayınlanan makalelerin telif hakkı anılan dergi-
ye devredilmiş sayılır ve bir hak iddia edilemez.

Editör metinlerde, şekillerde, girafiklerde ve fotoğraflarda değişiklik ve kaldırma
işlemi yapabilir. Bu yazarlar tarafından kabul edilmiş sayılır.

INSTRUCTIONS TO AUTHORS

“THE HERB Journal of Systematic Botany” publishes scientific papers concerning flowering and non flowering plants. The main topics considered are as follows: floristic and systematic botany, plant geography, economic botany; monographs, revisions, floras, systematic anatomy, palynology, cytology, phytochemistry; species new to science and Turkey for the rapid communication of results; local plant names and their usage; reviews comprising the recent developments, improvements, discoveries and ideas in various field of systematic botany.

Articles written in Turkish will be preferred, but those written in English, French, German, Portuguese, Spanish, Italian or Latin will also be considered.

Manuscripts should be prepared in the following order (if required): Title, abstract, key words, introduction, materials and methods, discussion, results, acknowledgements (including financial supporter or sponsor), references. The title page consists of the manuscript title, author’s names and appropriate addresses. Examples: *Gorkemia Yıldırımli* (*Brassicaceae*), a new genus to science from Turkey, Şinasi YILDIRIMLI, University of Hacettepe, Faculty of Science, Department of Biology, Section of Botany, 06800 Beytepe-Ankara-Türkiye, ot@hacettepe.edu.tr

All articles must have an English abstract. For articles written in a language other than Turkish, abstracts in that language and in English are required. References should be listed at the end of the article in the numerical order in which they appear firstly in the text in bracket e.g. (6), (6, 8), (6-10). Examples of reference writing: YILDIRIMLI, Ş., The chorology of the Turkish species of Asteraceae family, **OT Sistematik Botanik Dergisi**, 6, 2, 75-123, 1999; BAYTOP, A., **İstanbul Üniversitesi Eczacılık Fakültesi Herbariumundaki Türkiye Bitkileri I, Pteridophyta, Gymnospermae, Dicotyledones**, TÜBİTAK-TBAG 493 No'lu proje, İstanbul, 1984; HEDGE I.C., *Onobrychis Adans.* in P. H. Davis (ed.) “**Flora of Turkey and the East Aegean Islands**”, vol. 3, pp. 560-589, Edinburgh University Press, Edinburgh 1970. Line drawings, maps, graphs, and diagrams should be done in indian ink and numbered in pencil, and placed in text. A metric scale should be associated with each figure. Words to be italicized (in particular, all scientific names up to and including the super rank of species) should be typed in italic.

The copyright of published articles in “Ot Sistematik Botanik Dergisi” is accepted to assign by the authors to the cited journal.

Manuscripts should be sent to to Prof. Dr. Şinasi YILDIRIMLI by e-mail ot@hacettepe.edu.tr.

OT

SİSTEMATİK BOTANİK DERGİSİ

THE HERB JOURNAL OF SYSTEMATIC BOTANY

OT 25, 2, 1-170, 2018 - ISSN 1300-2953

İÇİNDEKİLER (CONTENTS)

- YILDIRIMLI Ş.1-22
Five new species, a new subspecies and a new combination
and status from gypsaceum areas of Ankara province, Turkey
- AKGÜL G.23-30
A new species of *Marrubium* L. (*Lamiaceae*),
M. lanatum Akgül from Niğde, Turkey
- YILDIRIMLI Ş. & KILIÇ Ö.31-39
Two new species of *Galium* L. (*Rubiaceae*) from Bingöl province,
Turkey
- GEMİCİ M. & GEMİCİ Y.41-70
izmir ili kent merkezi (Ege bölgesi-Türkiye) polinasyon takvimi
- YILDIRIMLI Ş.71-78
A new alien species, *Cardiospermum halicacabum* L.
(*Sapindaceae*)
- SARGIN S.A.79-104
İçel'in Bozyazı ilçesinde gıda olarak tüketilen yabancı bitkiler
- AKSOY N.105-150
Flora of the Elmacık dağı (Düzce-Turkey)
- BAYKAL H.B. & ATAMOV V.151-170
Flora of Isırlık natural park and environs (Rize-Turkey)