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Original research

Evaluation of the taxonomy and conservation status of *Podonosma sintenisii* (Boraginaceae)

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Abstract

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The current taxonomic status of an endemic species, *Podonosma sintenisii,* is discussed, and its morphology is compared with that of the closely related species *Podonosma orientalis*. Nutlet, leaf, and pollen micrographs of the species are presented using scanning electron microscopy. The identification key and geographical distribution map of *Podonosma sintenisii* and related species are presented, and the threat category is defined according to IUCN.

Keywords: distribution, endemic species, micromorphology, Southeastern Anatolia, Türkiye.

INTRODUCTION

When anthropogenic factors damage ecosystems, the population size of many species may decrease, and some may become extinct. Recognising the species most vulnerable to extinction is fundamental for biodiversity conservation efforts (Primack, 2010). Endemic species, which are distributed in a narrow area, are highly susceptible to these harmful factors. According to Zohary (1973), endemism can reveal some traces of evolution and biogeography processes and even speciation when properly analysed. IUCN (2012) has established conservation categories for these rare and endangered sensitive species.

Boraginaceae s.str. is a family represented by 90 genera and 1600–1700 taxa of species, subspecies, and variety rank (Simpson, 2019). Family members with limited economic importance are distributed in tropical and temperate regions. The family is divided into three subfamilies and 11 tribes (Feinbrun-Dothan, 1978; Chacón et al., 2016).

Lithospermeae, the second largest tribe of Boraginaceae, including some of the largest genera such as *Onosma* L., *Echium* L., and *Lithospermum* L., is represented by 26 genera and 470 taxa (Chacón et al., 2019).

Historically, *Podonosma* Boiss., due to its similarity, has been classified at different levels (sectional, species, subspecies) within the genus *Onosma* L.. It is a small genus that spreads in the region between the Eastern Mediterranean and Iran (Türkiye, Syria, Lebanon, Israel, Egypt, Iraq, and Iran) (Boissier, 1879; Riedl, 1967; Feinbrun-Dothan, 1978; Riedl, 1978; Weigend et al., 2016). The genus *Podonosma* is generally characterised by reflexed and narrow triangular corolla lobes, protracted anthers,

and curved and substipitate nutlets (Boissier, 1879; Muschler, 1912; Riedl, 1967; Weigend et al., 2016). The general structure and appearance of the corolla and androecium in *Podonosma* are very similar to the genus *Onosma*. The corolla and stamens of *Podonosma* are the same type found in *Onosma.* The corolla lobes are long, twice as long as their width and reflex in *Podonosma,* while they are always short, length same as their width, erect or loosely curved in *Onosma.* The anthers of *Podonosma,* like many *Onosma* species*,* converge into a tube, but unlike *Onosma,* only for a limited time. Then, they can only coexist along the edge of the fertile lower half, neither at the base of the theca nor along the edge of the terminal extension (Johnston, 1954).

No detailed information about the morphological features of *Podonosma sintenisii* except general information was found in the reviewed literature (Labillardiere, 1809; Boissier, 1879; Bornmüller, 1898; Muschler, 1912). *Podonosma sintenisii* is similar to *Podonosma orientalis* (Syn: *Onosma orientalis*) in general characteristics, but is different in its leaf, flower, and nutlet characteristics.

Kızılkuyu Wildlife Development Area, located on the Mesopotamian plains in the south-west of Şanlıurfa city centre in the Southeastern Anatolia Region of Türkiye, covers an area of 15 337 ha. The average height of the field is 600 m, and the highest point is about 765 m. The elevation gradually decreases from north to south. Most of the area consists of rocky regions of limestone structures. The weak and thin soil cover of these areas has led to the formation of a steppe with weak vegetation (Yeniyurt et al., 2009).

During a floristic survey in this area in April 2012, yellow-flowered *Podonosma* specimens resembling *Podonosma orientalis* (L.) Feinbrun., growing on the rocks, was collected. It was determined that these samples were different after the later examination. They were collected again in 2018, 2020, and 2021, with flowering and fruity samples from the same area and its close environment. As a result of the detailed examination of the samples with the relevant literature (Boissier, 1879; Muschler, 1912; Riedl, 1967; Feinbrun-Dothan, 1978; Riedl, 1978), it was determined that they were similar to *Podonosma orientalis*, but there were differences in some diagnostic characters (especially in corolla colour and nutlet shape). As a result of the examinations, both the presence of *Podonosma sintenisii* in Türkiye was confirmed, and the distribution area was updated with the samples collected from the Kızılkuyu Wildlife Development Area (Şanlıurfa).

This study aimed to detail the diagnostic characteristics of *Podonosma sintenis*ii on live specimens and determine the conservation status of the species.

MATERIALS AND METHODS

Podonosma sintenisii samples, the material of the study, were collected from Şanlıurfa Kızılkuyu Wildlife Development Area in 2012, 2018, 2020 and 2021. These specimens are preserved at the personal herbarium of the first author (Herbarium of Ö.F. Kaya) and the Herbarium of Dicle University (DUF). *Podonosma sintenisii* was compared with its close relative *Podonosma orientalis.* Leaf, nutlet and pollen samples were photographed using a Zeiss Evo 50 brand scanning electron microscope (SEM) at Harran University Science and Technology Application and Research Centre (HUBTAM) and added to the study. Herbarium acronyms are taken from the Index Herbariorum (2021) website. The *Podonosma* samples examined from virtual herbaria in this study are given in Appendix.

RESULTS

Currently, the genus *Podonosma* includes three species (*Podonosma galalensis* Schweinf. ex Boiss., *Podonosma orientalis* (L.) Feinbrun and *Podonosma sintenisii* Bornm.) distributed in North-East Africa, East Mediterranean and South-West Asia (Fig. 1).

Podonosma galalensis is an endemic species growing in eastern Central Egypt, north and south of the Galala plateau, close to the coastal part of the Gulf of Suez, and only known from these localities. *Podonosma orientalis* is distributed naturally in Iran, Iraq, Lebanon-Syria, Palestine and Türkiye (Riedl, 1967, 1978; Valdés, 2011; Weigend et al., 2016).

The other species, *Podonosma sintenisii*, is an endemic species growing only in the Mardin province in the Southeastern Anatolia Region of Türkiye and has been evaluated as a synonym of *Onosma orientalis* by both Riedl (1978) and Güner et al. (2012)

in the Flora of Turkey. Until this study, no information about the presence of *Podonosma* in Türkiye was reported in any study. It is accepted that *Podonosma sintenisii* is a separate species within the genus *Podonosma*, different from the genus *Onosma*, in light of taxonomic data obtained through studies conducted in recent years. (Valdés, 2011; Weigend et al., 2016).

Podonosma Boiss. Diagn. Pl. Orient 11: 113. 1849.

Podonosma sintenisii Bornm. in Verh. K.K. Zool.-Bot. Ges. Wien, 48: 609. 1898. – *Onosma sintenisii* (Bornm.) Bornm. in Repert. Spec. Nov. Regni Veg., 8: 540. 1910. – *Onosma orientalis* var. *sintenisii* (Bornm.) Riedl in Sitzungber, Österr. Akad. Wiss., Math.-Naturwiss. Kl., Abt. 1, Biol. 225: 5. 1964. Fig. 2.

Type: Türkiye, Mardin, in parietibus rupium, 09.vi.1888, *Sint. 1082* (LD!).

Description. Perennial, stem simple, numerous, procumbent to erect, 10–26 cm long, only branched above (floral part), with densely patent glabrous, tuberculate setose, and small tuberculate glandular-hairy. Leaves are densely glabrous, coarsely tuberculate setae with small tuberculate hairy and small glandular-hairy. Cauline leaves 15–33 × 10–16 mm, broadly ovate to orbiculate ovate, sessile, apex acute, upper leaves broadly ovate, subcordate at the base. Inflorescence branched, cymes lax, and elongated after flowering. Bracts ovate to lanceolate, densely hairy, 8–15 × 4–6 mm. Pedicel slender, 3–4 mm, elongated in 7–10 mm fruit. Calyx 5–7 mm, divided to base, lobes lanceolate, densely setose, and glandular-hairy, accrescent in fruit. Corolla pale yellow, 8–10 mm, cylindrical, corolla lobes 2–3 mm long, triangular–lanceolate, much longer than wide, acute and reflexed, yellow, sometimes turning bluish with age. The annulus is decorated with five glandular hairy nectar bundles. Filaments partly adnate to corolla

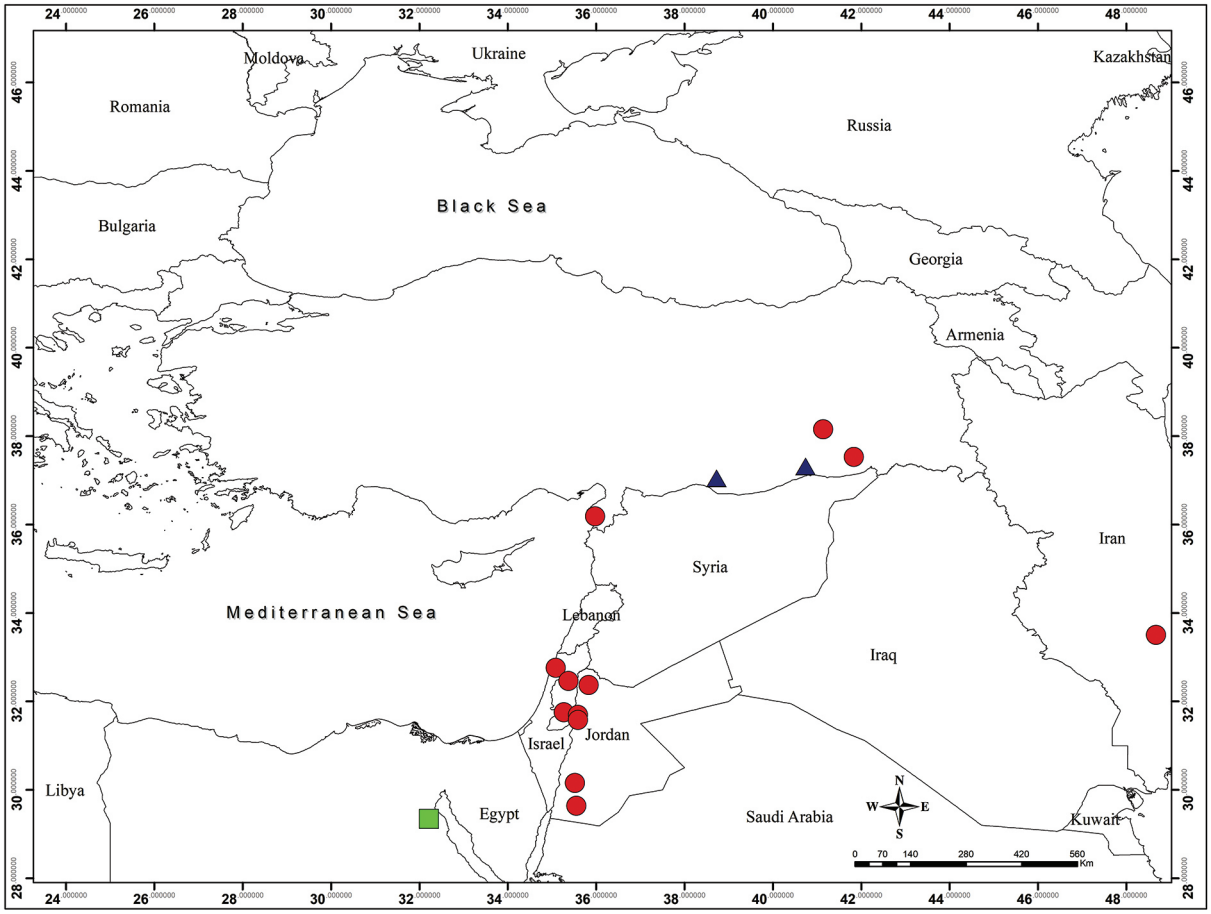

Fig. 1. Geographical distribution of *Podonosma sintenisii* (▲), *Podonosma orientalis* (●) and *Podonosma galalensis* (■).

Fig. 2. *Podonosma sintenisii*: flower (A), habitus (B), habitat from Kızılkuyu-Wildlife Protection and Improvement Area Şanlıurfa (C). Photographs by Ö.F. Kaya.

tube, free part of filament c. 2 mm. Anthers 7–8 mm long, exserted from corolla, sterile part acute, shorter than theca, 3 mm. Style elongated in fruit 15–16 mm. Nutlet 3–3.5 × 2.3–2.5 mm, broadly ovoid to roundish, straight, brown, densely coarsely verrucose.

Phenology. Flowering and fruiting occur from April to July.

Leaf morphology. *Podonosma sintenisii* leaves have coarsely tuberculate setae and small hairs. Setae with glabrous tubercles, 2–2.1 mm long, tubercles conical and multiseriate, surface of setae with sparse protuberance. *Podonosma orientalis* leaves have coarsely tuberculate setae and small hairs. Setae with glabrous tubercles, 1–1.2 mm long, tubercles roundish and uniseriate, surface of setae with densely scabrid (Fig. 3).

Nutlet morphology. *Podonosma sintenisii*; nutlets 3–3.5 × 2.3–2.5 mm, broadly ovoid to roundish, not curved, beak straight, distinctly acute, brown; surface of nutlet with densely coarsely verrucose, the width of the scar is half the width of the nutlet. epidermis cells isodiametric. *Podonosma orientalis;* nutlets 2–2.6 × 1.5–1.6 mm, ovoid, dorsally curved, beak turned to inwards, obtuse, brown; surface of nutlet with scattered and rounded tubercles, the width of the scar is equal to the width of the nutlet, epidermis cells elliptic (Fig. 4).

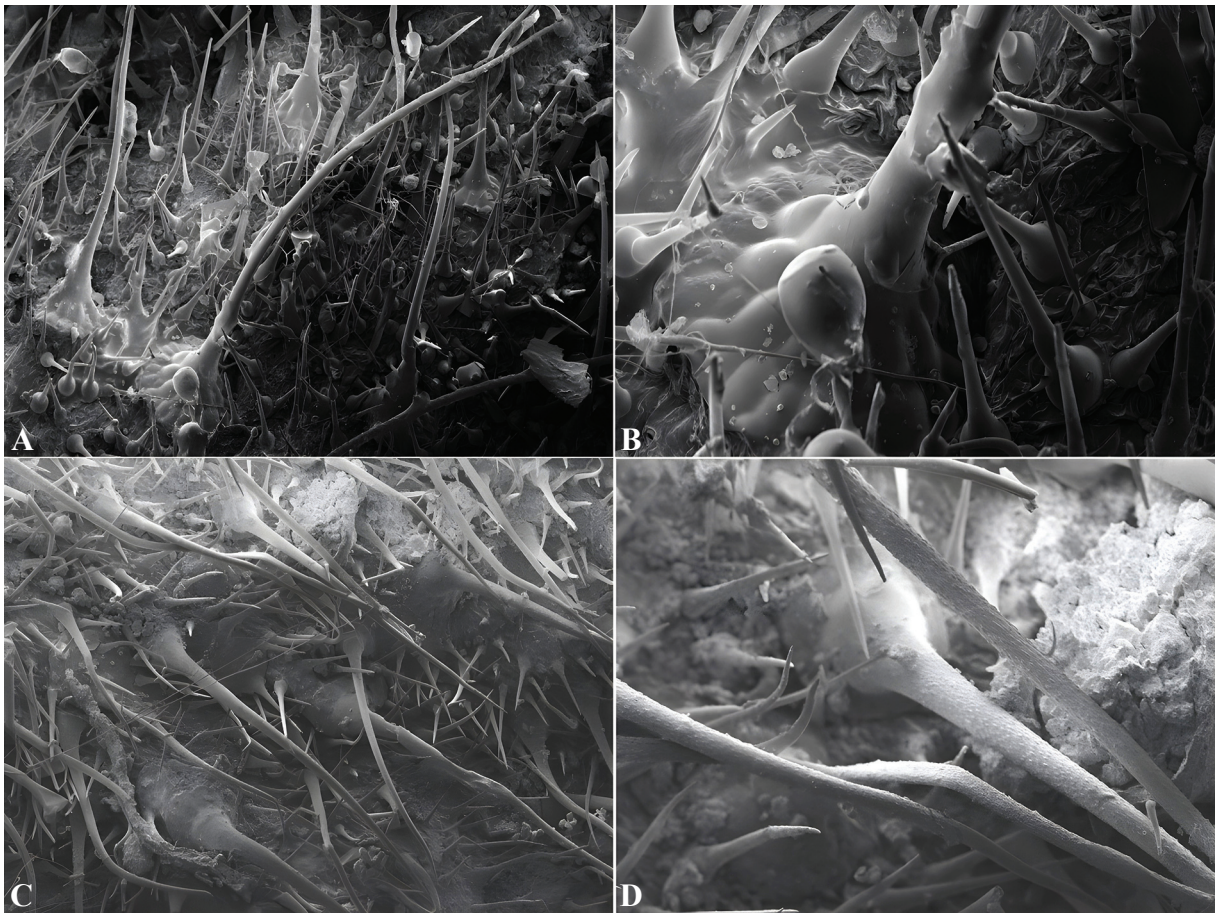

Fig. 3. Scanning electron micrographs of leaf upper surface. *Podonosma sintenisii* (A and B)*; Podonosma orientalis* (C and D).

Pollen morphology. Pollens were determined as heteropolar, subprolate and tricolporate in both species. The colpus ends with an elongated spike. The pore is endoaperture and located close to the distal end of the colpus. The ornamentation feature was detected as micro echinate-verrucate on the entire pollen surface. There is also an operculum with a verrucate ornamentation feature on the colpus of *Podonosma sintenisii*.

While the ornamentation feature is micro echinate-verrucate in both species, the essential difference between the two species is that in *Podonosma orientalis,* the echini are denser and regularly distributed over the entire pollen surface. In contrast, in *Podonosma sintenisii*, the echini are less frequent and less prominent in the polar regions (Fig. 5).

Distribution and habitat. *Podonosma sintenisii* is an endemic species that usually grows on rocky areas (slopes) in the provinces of Mardin and Şanlıurfa in the Southeastern Anatolia Region. Generally, the topographical structure of this area is plain, and the vegetation cover, which is the steppe, has been shaped by the effect of anthropogenic factors for a long time.

The area's vegetation has deteriorated floristically with the pressure of overgrazing. In the study area, phanerophytes like *Cerasus microcarpa* (C.A. Mey.) Boiss. subsp. *tortuosa* (Boiss. & Hausskn.) Browicz and *Ficus carica* L. subsp. *rupestris* (Boiss.) Browicz individuals are seen rarely. In the study area, the common herbaceous plants such as *Avena sterilis* L. subsp. *sterilis*, *Aegilops triuncialis* L. subsp. *triuncialis*, *Bromus japonicus* Thunb. subsp. *japonicus*, *Poa bulbosa* L. and *Astragalus diphtherites* Fenzl var. *diphtherites*, *Echinops orientalis* Trautv., which are tragantic thorny taxa and *Phlomis bruguieri* Desf. and *Phlomis kurdica* Rech.f., which are broadleaf perennials, are drawing attention.

Conservation status. *Podonosma sintenisii* is an endemic species with two populations growing (se-

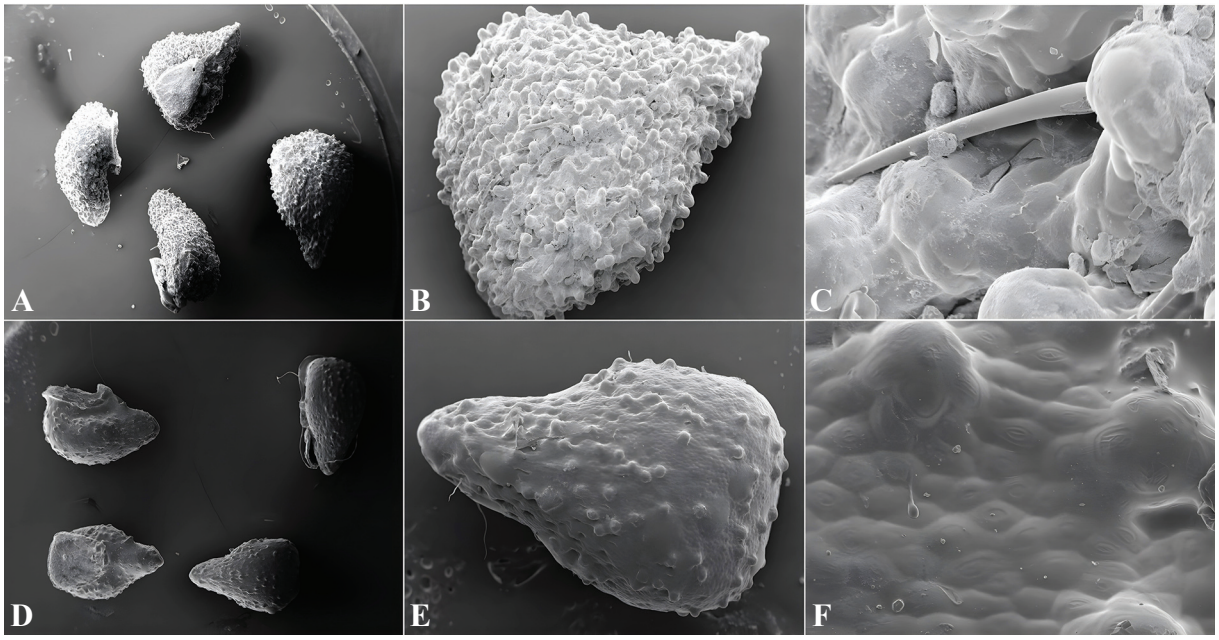

Fig. 4. Scanning electron micrographs of nutlet surface. *Podonosma sintenisii* (A, B and C); *Podonosma orientalis* (D, E and F).

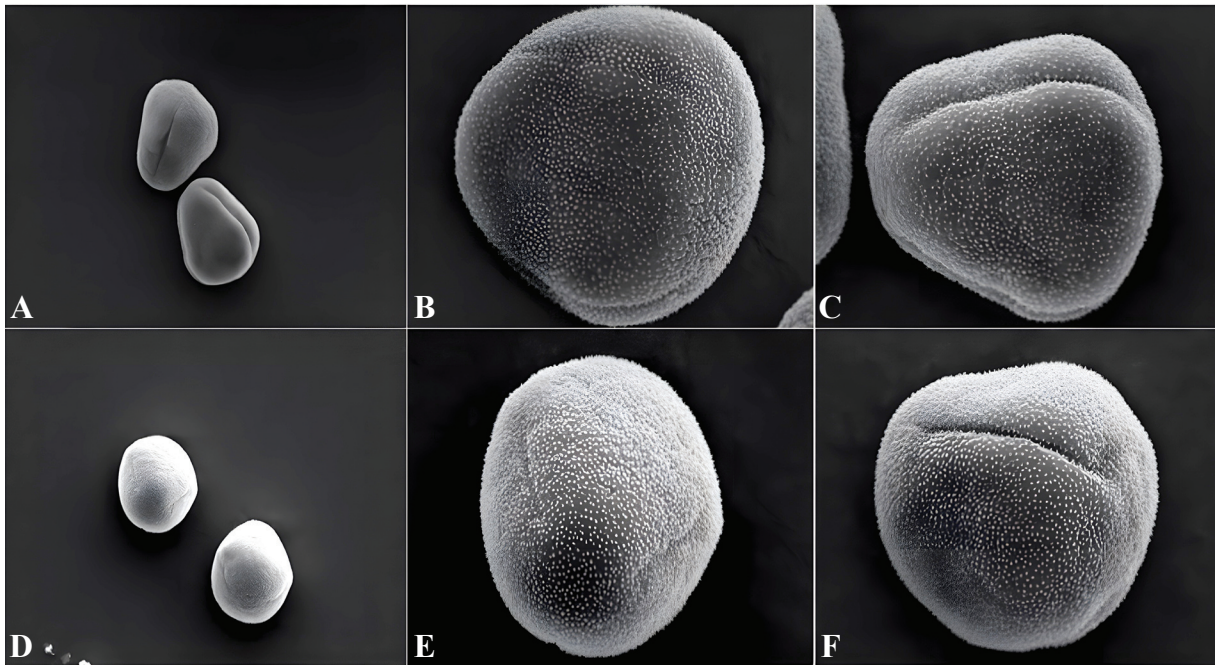

Fig. 5. Scanning electron micrographs of pollen surface. *Podonosma sintenisii* (A, B and C); *Podonosma orientalis* (D, E and F).

verely fragmented) in the provinces of Mardin and Şanlıurfa. The distance between the two populations is about 200 km, and there is not enough data about its distribution and population status in Mardin. The population of Kızılkuyu is approximately 5 km^2, and the number of individuals is around 200. Intensive agricultural and animal husbandry activities around the species habitat and in the species distribution area negatively affect the habitat quality and distribution. Due to these factors, it is recommended to be evaluated in the EN B2ab(iii) category according to IUCN (2012) Red List categories.

DISCUSSION

Podonosma is generally classified as a section of the genus *Onosma* in present floras, but in the past, it was called a separate genus. It has been accepted as a separate genus due to the evaluation of taxonomic and floristic studies in recent years. *Podonosma* is a small genus of three species distributed in the Middle East and Türkiye. *Podonosma galalensis* differs from other species of the genus *Podonosma* by having lanceolate or oblanceolate leaves, smaller calyx (3–4 mm long), and smaller and white corolla with short, triangular corolla lobes (ca. 1 mm). On the other hand, *Podonosma orientalis* is a characteristic species with a longer calyx (7–8 mm long), large and blue-coloured corolla (10–12 mm long), and curved nutlets, with a wide distribution. *Podonosma sintenisii* is an endemic species first collected from rocky areas in the province of Mardin in the Southeastern Region of Türkiye by Sintenis in 1888 and has been known only from this locality. Bornmüller (1898) has named them *Podonosma sintenisii,* which are with broadly ovate to orbiculate-ovate leaves and an enlarged calyx reaching 8 mm in length, but stated that the nutlet was not mature enough.

It was determined that the yellow-flowered *Podonosma* samples collected from Şanlıurfa Kızılkuyu Kızılkuyu-Wildlife Protection and Improvement Area in different years were similar to *Podonosma sintenisii* in terms of habitat, leaf and flower characteristics with the herbarium samples examined. In this study, a detailed description of the collected and herbarium samples of *Podonosma sintenisi* were given, and the SEM images and characteristics of the leaf, nutlet, and pollen samples of *Podonosma sintenisii* and *Podonosma orientalis* were compared.

According to this, *Podonosma sintenisii* is generally similar to *Podonosma orientalis*, but it is a separate species with large ovate or orbiculate-ovate leaves, yellow and smaller corolla, and larger and broadly ovate to round nutlets (Table 1; Fig. 2 and Fig. 6).

SEM images of leaf trichomes, nutlet shape, and surfaces of both species are quite different. Tubercles of setae in *Podonosma sintenisii* are multicellular and conical, the surface of setae with sparse protuberance. On the other hand, in *Podonosma orientalis,* tubercles are roundish and unicellular, and the surface of setae is densely scabrid.

Nutlets of *Podonosma sintenisii* are broadly ovoid to roundish, beak straight and acute; the nutlet's surface is densely coarsely verrucose, and epidermis cells isodiametric. Nutlets of *Podonosma orientalis* are ovoid, dorsally curved, beak turned inwards, and obtuse; the surface of nutlet with scattered and rounded tubercles and epidermis cells elliptic. Although both species are not significantly different in terms of their pollen, the most apparent difference is that echini of *Podonosma orientalis* are more densely and regularly distributed on the entire pollen surface, while in *Podonosma sintenisii* they are less frequently and further decrease in the polar regions.

Podonosma sintenisii is represented by one population that grows on limestone rocks at an altitude of 500–650 m on average only in the Şanlıurfa Kızılkuyu-Wildlife Protection and Improvement Area. *Podonosma sintenisii* usually flowers in April. The flowering period can extend until May. However, the flowering period of *Podonosma orientalis* begins in May and continues until the end of June.

As a result, it is determined that *Podonosma sintenisii* is distributed not only in Mardin, the only location known in Türkiye so far, but also in Şanlıurfa. The features of the diagnostic characters, which are essential in identifying the plant taxonomically, are given in detail together with numerical data. According to the data obtained from this study, the genus *Podonosma* is represented by two species in the flora of Türkiye. One of these species, *Podonosma sintenisii* is an endemic species growing locally in the Southeastern Anatolia Region. At the same time, *Podonosma orientalis* is a common species spreading in the Southeastern Anatolia and Mediterranean Regions.

Key to the genus *Podonosma*

1. Leaves oblong-linear to narrowly lanceolate, 2–5 mm broad, calyx to 4 mm long ……. *Podonosma galalensis*

1. Leaves lanceolate to obovate or ovate to orbiculate, 7–17 mm wide, calyx longer than 5 mm
   – Corolla blue, 10 (–13) mm, nutlet ovoid, 2–2.6 mm, dorsally curved, scattered rounded tubercles ..... *Podonosma orientalis*
   – Corolla pale yellow, 8–10 mm, nutlet broadly ovoid to roundish, 3–3.5 mm, straight, densely-coarsely verrucose ……. *Podonosma sintenisii*

Table 1. Morphological comparison of *Podonosma orientalis* and *Podonosma sintenisii*

Characters	*Podonosma orientalis*	*Podonosma sintenisii*
Stem	7–22 cm long	10–26 cm long
Leaves	12–35 × 7–17 mm, lanceolate to obovate; indumentum coarsely tuberculate and small hairs, tuberculate hairs 1–1.2 mm long, tubercles of setae uniseriate	15–33 × 10–16 mm, broadly ovate to orbiculate-ovate; indumentum coarsely tuberculate and small glandular hairs, tuberculate hairs 2–2.1 mm long, tubercles of setae multiseriate
Calyx	7–8 mm long, not accrescent in fruit	5–7 mm long, accrescent in fruit
Corolla	blue, 10–12 mm long; corolla lobes triangular, reflexed, 1.5 mm long, acute	pale yellow, 8–10 mm long; corolla lobes triangular, reflexed, 2–3 mm long, acute
Anther	5–6 mm long, sterile part as long as theca	7–8 mm long; sterile part shorter than theca
Nutlet	2.5 × 1.5 mm, ovoid, incurved, warty to tuberculate, sometimes rugose; the width of the scar is half the width of the nutlet	3–3.5 × 2.3–2.5 mm, broadly ovoid to roundish, straight, densely coarsely verrucose; the width of the scar is equal to the width of the nutlet

Fig. 6. *Podonosma orientalis*: flower (A), habitus (B), habitat from Dargeçit-Mardin (C). Photographs by Ö.F. Kaya.

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Author contributions. Both authors made equal contributions to this article. Both authors agreed to the final version of the manuscript.

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APPENDIX

The list of examined samples of *Podonosma* species

Podonosma galalensis

1. Wadi Natseh, Quelle, Mittelegyptische Wüste, arabische Seite, Egypt, Schweinf. 64, 16 April 1878, K000419076. Lectotype (K)
2. Wadi Natseh, Quelle, Mittelegyptische Wüste, arabische Seite, Egypt, Schweinf. 64, 16 April 1878, P00556861 (P)
3. W. Natfeb. Quelle mittelaegyptische Wüste, arabische Seite, Egypt, Schweinf. 64, 16 April 1878, W 1879-0000184. Isotype (W)
4. Egypt, L. Kralik, 1847, P00556860 (P)
5. Wadi Na'ük, im nördlichsten Theile der oestlichen Wüste von Aegypten, Egypt, Schweinf. s.n., 3 June 1881, US 806132 (US)
6. Wadi Naux (u de Wadi Dachuna) Nordavfall de nördlicen Galala mittelaegyptische Wüste, arabische Seite, Egypt, Schweinf. s.n., 3 June 1881, O-V2242462 (O)
7. N. Galala, W. Nooz, near W. Dehayba, in crevices of shady dolomitic limestone rocks in the narrowest part of the gorge with *Capparis*, Egypt, P.H. Davis 7072, 27 March 1944, E00936434 (E)

Podonosma orientalis

1. Wadi Ram, 914 m, Jordan, P.H. Davis 8984, 13 April 1945, E00936643 (E)
2. Gebel Attarus, 700 m, Jordan, P.H. Davis 8728, 25 April 1945, E00936640 (E)
3. Amman Jebel Attarus, 609–701 m, Jordan, P.H. Davis 8728, 25 April 1945, K000286179 (K)
4. Ajlun, behind the village, Jordan, P.H. Davis 9529, 2 May 1945, E00936641 (E)
5. Mardin, Mardin castle, 1200 m, Türkiye, P.H. Davis & Hedge, D.28331, 20 May 1957, E00936647 (E)
6. Northern and western Iran, S. Lorestan, Sheshoom, 800–1100 m, Iran, M. Jacobs 6441, 28 April 1963, L.2760944 (WAG)
7. Maan Wadi Rum 3 km south of Rum fort, 1100, Jordan, J.B. Gillett 16065, 4 May 1963, K000286172 (K)
8. B8 Diyarbakır, c. 10 km east of Silvan, limestone rocks by caves, 900 m, Türkiye, Rix 1867, 10 May 1972, E00936660 (E)
9. Samarian Mts. S.E. of Nablus, 200 m, Palestine, K.U. Kramer 6662, 27 March 1979, U.1163589 (WAG)
10. Batha vegetation dominated by *Sarcopoterium spinosum*, *Cistus creticus*, etc., on steep, limestone mountain slopes east of Al Bireh, 31 52'N; 35 12'E, 800 m, Israel, L. Musselman, 07 January 1987, E00099593 (E)
11. Mountain Heights Plateau, Petra, archaeological site, Jordan, J. Walter 7487, 15 March 1992, W2006-0019699 (W)
12. B8 Diyarbakır: Eğil, Eğil castle, rocky slopes, 850–900 m, Türkiye, Ertekin 2001–72, 28 April 2001, (DUF)
13. The Judean Desert, Wadi Kelt nr St. George monastery, 900 m, Israel, Pimenov, 18 March 2007, MW0746409 (MW)
14. Mount Carmel, Nahal Kelah-Galim Nature Reserve, near the cave, on rocks, 110 m, Israel, N. Lavrenov A-944, 31 January 2014, MW0746407 (MW)
15. Dead Sea Valley, En Gedi Nature Reserve, Wadi David, above the cave, cliff, 230 m, Israel, N. Lavrenov A-1129, 3 February 2014, MW0746408 (MW)
16. B8 Diyarbakır: around Silvan, Türkiye, Ertekin 2018–125, 23 June 2018, (DUF)
17. Jerusalem, Northern city wall NE of Damascus Gate, in crevices between blocks of city wall. 780 m, Israel, Wieringa 9107, 22 April 2019, WAG.1945122 (WAG)

Podonosma sintenisii

1. Mardin, in decliv. rupium, Türkiye, Sint. 1082, 9 June 1888, B 10 0365440. Isotype (B)
2. Mardin, ad parietis rupium, Türkiye, Sint. 1082, 9 June 1888, BR0000006967987. Isotype (BR)
3. Mardin, ad parietis rupium, Türkiye, Sint. 1082, 9 June 1888, JE 00005222. Isotype (JE)
4. Mardin, ad parietis rupium, Türkiye, Sint. 1082, 9 June 1888, LD 1209861. Type (LD)
5. Mardin, in saxosis, Türkiye, Sint. 1082, 9 June 1888, LY0449475. Isotype (LY)
6. Mardin, in decliv. rupium, Türkiye, Sint. 1082, 9 June 1888, P03878820. Isotype (P)
7. Mardin, in decliv. rupium, Türkiye, Sint. 1082, 9 June 1888, P03878821. Isotype (P)
8. Mardin, in decliv. rupium, Türkiye, Sint. 1082, 9 June 1888, P03878822. Isotype (P)
9. Mardin, in decliv. rupium, Türkiye, Sint. 1082, 9 June 1888, P03878827. Isotype (P)
10. Mardin, ad parietis rupium, Türkiye, Sint. 1082, 9 June 1888, S-G-4949. Isotype (S)
11. Mardin, ad parietis rupium, Türkiye, Sint. 1082, 9 June 1888, WU0069948. Isotype (WU)
12. Şanlıurfa, Kızılkuyu Wildlife Development Area, rocky slopes, 535 m, Türkiye, Ö.F. Kaya 4841, 23 April 2012
13. Şanlıurfa, Kızılkuyu Wildlife Development Area, rocky slopes, 535 m, Türkiye, Ö.F. Kaya 6171, 1 April 2018
14. Şanlıurfa, Kızılkuyu Wildlife Development Area, rocky slopes, 535 m, Türkiye, Ö.F. Kaya 6399, 5 June 2020
15. Şanlıurfa, Kızılkuyu Wildlife Development Area, rocky slopes, 535 m, Türkiye, Ö.F. Kaya 6691, 9 April 2021

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