

New floristic records in the Balkans: 54*

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Abstract. New chorological data are presented for 95 species and subspecies from Bulgaria (1, 60, 85-90) and Greece (2-59, 61-84, 91-95). The taxa belong to the following families: *Alliaceae* (57), *Anacardiaceae* (2), *Apiaceae* (3, 20, 21, 85, 91), *Araceae* (17), *Asteraceae* (4, 5, 22-30, 60, 61, 63, 64, 73, 74, 92), *Boraginaceae* (6, 75), *Brassicaceae* (32, 76), *Campanulaceae* (33), *Caryophyllaceae* (7, 8, 34-37, 65, 66, 77, 78, 93, 95), *Chenopodiaceae* (38, 62), *Colchicaceae* (84), *Convolvulaceae* (39), *Crassulaceae* (40), *Euphorbiaceae* (41), *Fabaceae* (1, 9-13, 42, 43), *Fumariaceae* (67), *Gentianaceae* (44, 45), *Hypericaceae* (46, 79), *Iridaceae* (58, 89), *Lamiaceae* (68, 80), *Lauraceae* (14), *Liliaceae* (94), *Malvaceae* (15), *Myrtaceae* (47), *Orchidaceae* (90), *Oxalidaceae* (48, 49), *Papaveraceae* (69, 86), *Plantaginaceae* (81), *Plumbaginaceae* (70), *Poaceae* (18, 59), *Polygalaceae* (50), *Portulacaceae* (51), *Pteridaceae* (19), *Ranunculaceae* (52, 53, 71, 82, 87), *Rubiaceae* (72), *Rutaceae* (54), *Scrophulariaceae* s.l. (55, 88), *Thymelaeaceae* (83), *Urticaceae* (16), and *Zygophyllaceae* (56).

A new taxon for science is: *Dianthus biflorus* var. *pilosus* Zograf. & Dimitrellos (95).

A new combination is: *Asperula sapphus* (Gutermann) Kit Tan (72).

The publication includes contributions by: A. Asenov (1), B. Biel & Kit Tan (2-18), C. Cattaneo & M. Grano (19-59), D. Dimitrov (60), K. Kalaentzis (61), D. Shaw & Kit Tan (62), Kit Tan & G. Drolapa (63-64), Kit Tan & G. Kofinas (65-72), Kit Tan & Sister Pachomia (73-84), R. Tzonev, G. Kunev & I. Hristov (85-90), G. Zarkos, V. Christodoulou & Kit Tan (91-94), and A. Zografidis & G. Dimitrellos (95).

Key words: Balkan Peninsula, Bulgaria, Greece, new plant records, South-East Europe, vascular plants

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Report 1

Asen Asenov

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Fabaceae

1. *Ononis spinosa* L.

Bu Valley of River Mesta: near the village of Mesta, GM22, 31.07.2007, coll. A. Asenov (SO 108 362).
New for this floristic region.

Reports 2–18

Burkhard Biel & Kit Tan*

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This is the thirteenth report of new plant-records for the island of Milos (phytogeographical region Kiklades, Nomos Kikladon, Eparchia Milou) based on annual visits in 2022–2024. The 17 records listed are new for the island unless otherwise stated. Eight of the species were found to be new for the floristic region Kiklades (Kik) as circumscribed in Flora Hellenica (Strid & Tan 1997), and the total number of new records we have so far found for this floristic region are now 120. Occurrence on the other Kikladean islands is briefly summarized.

Anacardiaceae

2. *Schinus molle* L. (Fig. 1)

Gr S-SE of Pollonia, phrygana and waste ground east of road, 10 m, 36°45'31"N, 24°31'41"E, 13.05.2024, Biel obs. (photo).

New for the Kiklades. Established escape from planting.

Apiaceae

3. *Ammi visnaga* (L.) Lam.

Gr N of Zefyria, field margins at road crossing, near well, 15 m, 36°42'46"N, 24°29'27"E, 04.05.2024, Biel 24.139.

New for the Kiklades. Also noted W of Zefyria.

Asteraceae

4. *Erigeron sumatrensis* Retz.

Gr Adamas, ruderal sites and phrygana at road by-pass, 8 m, 36°43'36"N, 24°26'31"E, 15.05.2024, Biel 24.213.



Fig. 1. *Schinus molle* (photo B. Biel).

Reported for several islands of the northern Kiklades. Also noted near Triovasalos.

5. *Filago arvensis* L.

Gr W-SW of Zefyria, field margins and sandy dirt road, 7 m, 36°41'54"N, 24°29'07"E, 04.05.2024, Biel 24.143.
New for the Kiklades. Two other sites were noted N of Ag. Marina.

Boraginaceae

6. *Myosotis discolor* Pers.

Gr W margin of Achivadolimni, wet area with spring near Ag. Konstantinos, 3 m, 36°41'16"N, 24°26'21"E, 07.04.2024, Biel 24.051.

Reported for Andros and Naxos in the Kiklades.

Caryophyllaceae

7. *Cerastium illyricum* subsp. *brachiatum* (Lonsing) Jalas

Gr W margin of Achivadolimni, wet area with spring near Ag. Konstantinos, 3 m, 36°41'16"N, 24°26'21"E, 07.04.2024, Biel 24.057.

New for the Kiklades.

8. *Velezia rigida* L.

Gr NNE of Chodro Vouno, open phrygana with shrubs on ridge, 195 m, 36°41'39"N, 24°22'33"E, 09.05.2024, *Biel* 24.176.

Reported for most of the Kiklades. Also noted E of Triovasalos.

Fabaceae

9. *Onobrychis viciifolia* Scop.

Gr NE of Adamas, garden of holiday home, at dirt road, 20 m, 36°43'51"N, 24°27'12"E, 16.04.2024, *Biel* 24.128.

New for the Kiklades, reported from Crete in the Aegean islands.

10. *Ononis pusilla* L.

Gr N of Paliochori, phrygana slope at dirt road junction, near stable, 140 m, 36°41'16"N, 24°30'53"E, 13.04.2024, *Biel* 24.114; N-NE of Paliochori, phrygana and scrub in stream valley with pond in mining area above, 55 m, 36°42'09"N, 24°32'18"E, 08.05.2024, *Biel* 24.167.

New for the Kiklades. Also noted near Pachena and Plakes.

11. *Robinia pseudoacacia* L.

Gr N-NW of Adamas, grassy embankment of main road, 50 m, 36°44'06"N, 24°26'31"E, 16.04.2024, *Biel* 24.127.

Established. Also noted at Plakes and E of Adamas.

12. *Trifolium petrisavii* Clementi

Gr SW of Kipos, rocky phrygana with *Juniperus* and pool, at road bend, 75 m, 36°39'54"N, 24°25'47"E, 26.03.2024, *Biel* 24.106; *loc. ibid.* 12.05.2024, *Biel* 24.196.

New for the Kiklades.

13. *Trigonella corniculata* subsp. *corniculata* (L.) L.

Gr E of Pachena, coastal phrygana at Papafragas, 10 m, 36°45'13"N, 24°30'12"E, 13.05.2024, *Biel* 24.202.

Reported from Ios and Naxos.

Lauraceae

14. *Laurus nobilis* L. (Figs. 2 & 2A)

Gr E of Pachena, stream valley with olive planting and *Arundo*, 6 m, 36°45'23"N, 24°30'33"E, 10.04.2024, *Biel* 24.090.



Fig. 2. *Laurus nobilis* (photo B. Biel).



Fig. 2A. *Laurus nobilis* (photo B. Biel).

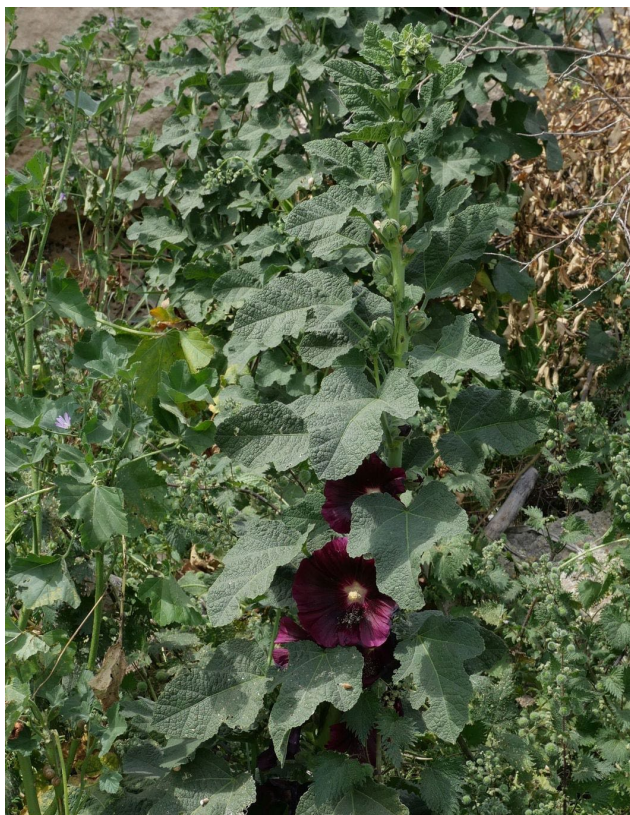


Fig. 3. *Alcea biennis* subsp. *cretica* (photo B. Biel).



Fig. 4. *Parietaria officinalis* (photo B. Biel).

Reported from Andros and Tinos in N Kiklades.

Malvaceae

15. *Alcea biennis* subsp. *cretica* (Weinm.) Valdés (Fig. 3)

Gr Adamas, waste ground, parks, road margins in village, 10 m, 36°43'32"N, 24°26'42"E, 08.04.2024, Biel obs. (photo).

Reported only from Paros in C Kiklades.

Urticaceae

16. *Parietaria officinalis* L. (Fig. 4)

Gr NW of Adamas, wet slope above stream, near sewage plant, 30 m, 36°43'53"N, 24°26'20"E, 07.05.2022, Biel 22.204.

New for the Kiklades.

Araceae

17. *Zantedeschia aethiopica* (L.) Spreng. (Fig. 5)

Gr W of Zefyria, road slopes with *Eucalyptus* and *Symphytotrichum squamatum*, 15 m, 36°42'03"N, 24°29'15"E, 02.02.2022, Biel obs. (photo).

Reported from several islands in the Kiklades. Also noted in three localities south and east of Adamas.



Fig. 5. *Zantedeschia aethiopica* (photo B. Biel).

Poaceae**18. *Bromus lanceolatus* Roth**

Gr N of Adamas, slope of stream valley with olive trees and phrygana, 15 m, 36°43'52"N, 24°26'38"E, 05.05.2024, *Biel* 24.144.

In the Kiklades, only reported from Naxos.

Cited vouchers are provisionally kept in the private herbarium of B. Biel at Höchberg (herb. Biel).

Reports 19–59**Cristina Cattaneo* & Mauro Grano**

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New records from the Dodecanese islands of Kalymnos and Telendos and from the East Aegean island of Fourni are provided.

Pteridaceae**19. *Anogramma leptophylla* (L.) Link**

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, limestone cliffs above Aghios Kostantinos chapel, 270 m, 37°00'39"N, 26°54'37"E, 24.04.2024, *Cattaneo & Grano* 2501 (herb. Cattaneo).

Apiaceae**20. *Ferula communis* L.**

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, crevices of limestone rocks, 300 m, 37°00'39"N, 26°54'17"E, 24.04.2024, *Cattaneo & Grano* obs., photo.

21. *Torilis africana* Spreng.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Koumara, phrygana, 60 m, 37°35'11"N, 26°29'12"E, 27.05.2024, *Cattaneo* 2543 (herb. Cattaneo).

Asteraceae**22. *Andryala integrifolia* L.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Koumara, near the coast on damp sandy soil, 16 m, 37°35'14"N, 26°29'17"E, 22.05.2024, *Cattaneo* 2574 (herb. Cattaneo).

23. *Atractylis cancellata* L.

Gr Nomos Dodekanisou, Eparchia Kalimnou: is-



Fig. 6. *Centaurea acicularis* (photo C. Cattaneo).

land of Telendos, along the coast, phrygana, 10 m, 37°00'20"N, 26°55'25"E, 22.04.2024, *Cattaneo & Grano* obs., photo.

24. *Centaurea acicularis* Sm. (Fig. 6)

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, crevices of limestone rocks, 278 m, 37°00'40"N, 26°54'17"E, 24.04.2024, *Cattaneo & Grano* obs., photo.

Occurring on several East Aegean islands and W Anatolia.

25. *Centaurea spinosa* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, near main settlement, sporadic constituent of the phrygana, 67 m, 37°34'24"N, 26°28'42"E, 19.05.2024, *Cattaneo* obs., photo.

26. *Crepis micrantha* Czerep.

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, along the coast, 17 m, 37°00'43"N, 26°55'00"E, 22.04.2024, *Cattaneo & Grano* 2527 (herb. Cattaneo).

— Nomos Samou, Eparchia Ikarias island of Fourni, Koumara, phrygana, 43 m, 37°35'11"N, 26°29'15"E, 20.05.2024, *Cattaneo* 2571, 2572 (herb. Cattaneo).

27. *Filago aegaea* subsp. *aristata* Wagenitz

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Vitsilia, crevices of limestone rocks near the coast, 34 m, 37°32'36"N, 26°30'22"E, 20.05.2024, *Cattaneo* 2548 (herb. Cattaneo).

28. *Filago contracta* (Boiss.) Chrtek & Holub

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Kalymnos, Mt Profitis Ilias, 505 m, 36°58'56"N, 26°58'03"E, 23.04.2024, *Cattaneo* & *Grano* 2584 (herb. Cattaneo), photo.

29. *Leontodon tuberosus* L.

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, near limestone cliffs, 210 m, 37°00'43"N, 26°54'17"E, 24.04.2024, *Cattaneo* & *Grano* 2533 (herb. Cattaneo).

30. *Tolpis umbellata* Bertol.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Dafnolies, phrygana, 153 m, 37°34'37"N, 26°29'18"E, 22.05.2024, *Cattaneo* 2562 (herb. Cattaneo).

Boraginaceae

31. *Heliotropium dolosum* De Not.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Chrysomilia, 31 m, 37°37'44"N, 26°30'30"E, 23.05.2024, *Cattaneo* 2582 (herb. Cattaneo).

Brassicaceae

32. *Biscutella didyma* L.

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, phrygana, 214 m, 37°00'41"N, 26°54'42"E, 22.04.2024, *Cattaneo* & *Grano* 2492 (herb. Cattaneo).

Campanulaceae

33. *Legousia speculum-veneris* (L.) Chaix

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, shady place near limestone cliffs, 210 m, 37°00'43"N, 26°54'17"E, 24.04.2024, *Cattaneo* & *Grano* 2490 (herb. Cattaneo), photo.

Caryophyllaceae

34. *Cerastium brachypetalum* Pers.

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, rocky shady



Fig. 7. *Convolvulus siculus* (photo C. Cattaneo).

place, 243 m, 37°00'41"N, 26°54'16"E, 24.04.2024, *Cattaneo* & *Grano* 2505 (herb. Cattaneo).

35. *Herniaria hirsuta* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Koumara, damp sandy soil in association with *Andryala integrifolia*, 16 m, 37°35'14"N, 26°29'17"E, 22.05.2024, *Cattaneo* 2547 (herb. Cattaneo).

36. *Polycarpon alsinifolium* (Biv.) DC.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, main settlement, sandy coastal area, 119 m, 37°34'26"N, 26°29'09"E, 22.05.2024, *Cattaneo* 2549 (herb. Cattaneo).

37. *Polycarpon tetraphyllum* (L.) L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, main settlement, roadsides, 7 m, 37°34'36"N, 26°28'48"E, 20.05.2024, *Cattaneo* 2550 (herb. Cattaneo).

Chenopodiaceae

38. *Chenopodium giganteum* D. Don

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Chrysomilia, near the port, 2 m, 37°37'39"N, 26°30'26"E, 23.05.2024, *Cattaneo* 2570 (herb. Cattaneo).



Fig. 8. *Umbilicus chloranthus* habit (photo C. Cattaneo).



Fig. 8A. *Umbilicus chloranthus* part of inflorescence (photo C. Cattaneo).

Convolvulaceae

39. *Convolvulus siculus* L. (Fig. 7)

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, at the base of limestone cliffs above Aghios Kostantinos chapel, 260 m, 37°00'39"N, 26°54'37"E, 24.04.2024, Cattaneo & Grano 2504 (herb. Cattaneo).

Crassulaceae

40. *Umbilicus chloranthus* Boiss. (Figs. 8 & 8A)

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Kalymnos, Mt Profitis Ilias, crevices of

limestone rocks, 562 m, 36°58'42"N, 26°58'10"E, 23.04.2024, Cattaneo & Grano 2609 (herb. Cattaneo), photo.

Euphorbiaceae

41. *Euphorbia hypericifolia* L. (Fig. 9)

Gr Nomos Samou, Eparchia Ikarias: island of Four-ni, main settlement, along paved road, 25 m, 37°34'28"N, 26°28'57"E, 19.05.2024, Cattaneo 2541, 2542 (herb. Cattaneo), photo.

Recorded from several islands in the East Aegean viz., Chalki, Rodos, Megisti, Ikaria, Tilos, Simi.

Fabaceae**42. *Medicago marina* L.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Kasidi, sandy beach, 15 m, 37°32'12"N, 26°29'59"E, 21.05.2024, *Cattaneo* 2565 (herb. *Cattaneo*), photo.

43. *Securigera cretica* (L.) Lassen

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Chrysomilia, olive groves, 38 m, 37°37'44"N, 26°30'32"E, 23.05.2024, *Cattaneo* 2567 (herb. *Cattaneo*), photo.

Gentianaceae**44. *Centaurium erythraea* Rafn**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Petrokopio, phrygana, 14 m, 37°33'35"N, 26°29'19"E, 26.05.2024, *Cattaneo* 2563 (herb. *Cattaneo*), photo.

45. *Centaurium pulchellum* (Sw.) Druce

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, along the coast, 10 m, 37°00'22"N, 26°55'25"E, 22.04.2024, *Cattaneo* & *Grano* 2482 (herb. *Cattaneo*).

Hypericaceae**46. *Hypericum empetrifolium* Willd.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Aghia Marina, roadsides, 119 m, 37°34'26"N, 26°29'09"E, 22.05.2024, *Cattaneo* 2575 (herb. *Cattaneo*), photo.

Myrtaceae**47. *Myrtus communis* L.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Koumara, 43 m, 37°35'11"N, 26°29'14"E, 22.05.2024, *Cattaneo* obs., photo.

Oxalidaceae**48. *Oxalis corniculata* L.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, main settlement, roadsides, 39 m, 37°34'26"N, 26°29'01"E, 19.05.2024, *Cattaneo* obs., photo.

49. *Oxalis pes-caprae* L.

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, Lambda climbing area, shady place,



Fig. 9. *Euphorbia hypericifolia* (photo C. Cattaneo).

210 m, 37°00'43"N, 26°54'17"E, 24.04.2024, *Cattaneo* & *Grano* obs., photo.

Polygalaceae**50. *Polygala monspeliaca* L.**

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, along the coast, 41 m, 37°00'26"N, 26°55'21"E, 22.04.2024, *Cattaneo* & *Grano* 2516 (herb. *Cattaneo*).

— Nomos Samou, Eparchia Ikarias island of Fourni, Plagia, phrygana 113 m, 37°33'27"N, 26°29'31"E, 26.05.2024, *Cattaneo* 2544 (herb. *Cattaneo*).

Portulacaceae**51. *Portulaca oleracea* aggr.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Chrysomilia, roadsides near the port, 2 m, 37°37'38"N, 26°30'27"E, 23.05.2024, *Cattaneo* obs., photo.

Ranunculaceae**52. *Clematis cirrhosa* L.**

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Panaghia, near stream, 106 m, 37°34'45"N, 26°29'12"E, 19.05.2024, *Cattaneo* obs.



Fig. 10. *Allium candargyi* (photo C. Cattaneo).

53. *Delphinium peregrinum* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Vitsilia, phrygana, 20 m, 37°32'41"N, 26°30'16"E, 21.05.2024, Cattaneo 2580 (herb. Cattaneo).

Rutaceae

54. *Ruta chalepensis* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Aghia Marina, fallow field, 156 m, 37°34'21"N, 26°29'16"E, 22.05.2024, Cattaneo obs., photo.

Scrophulariaceae

55. *Kickxia commutata* (Rchb.) Fritsch

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Kamari, 43 m, 37°35'57"E, 26°31'50"N, 23.05.2024, Cattaneo 2568 (herb. Cattaneo).

Zygophyllaceae

56. *Tribulus terrestris* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Chrysomilia, roadsides, 8 m, 37°37'40"N, 26°30'28"E, 23.05.2024, Cattaneo 2564 (herb. Cattaneo).

Alliaceae

57. *Allium candargyi* Karavok. & Tzanoud. (Fig. 10)

Gr Nomos Dodekanisou, Eparchia Kalimnou: island of Telendos, crevices of limestone rocks near Aghios Kostantinos chapel, 86 m, 37°00'50"N, 26°54'47"E, 22.04.2024, Cattaneo & Grano 2583 (herb. Cattaneo, conf. D. Tzanoudakis, May 2024). Recorded only for Kalymnos and Lesvos.

Iridaceae

58. *Iris germanica* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Dafnolies, 165 m, 37°34'34"N, 26°29'16"E, 22.05.2024, Cattaneo obs., photo.

Poaceae

59. *Melica ciliata* L.

Gr Nomos Samou, Eparchia Ikarias: island of Fourni, Dafnolies, roadsides, 119 m, 37°34'26"N, 26°29'09"E, 22.05.2024, Cattaneo 2556 (herb. Cattaneo), photo.



Fig. 11. *Achillea leptophylla* (photo D. Dimitrov).

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Asteraceae

60. *Achillea leptophylla* M. Bieb. (Fig. 11)

Bu Northeast Bulgaria: Protected area “Provadiysko-Royaksko Plato”, Provadia Municipality, Varna District, on dry stony and calcareous places SE of the village of Krivnya, and W of the town of Provadia, 201 m, 43.17963°N, 27.42956°E, 09.06.2023, leg. & det. D. Dimitrov (SOM 178916). *Achillea leptophylla* is a Pontic-Balkan geoelement,

one of our rarest taxa, localized only in a few localities in the North-Eastern Bulgaria floristic region (Assyov & Denchev 2015). It was assessed as ‘Endangerend’ in the Bulgarian flora (Assyov & Denchev 2009, 2015) and is legally protected under the national Biodiversity Act. A new locality of the species was registered W of the town of Provadia on a flat section, SE of the village of Krivnya. The population is small, consisting of 4–5 plants spread over an area of about 5–6 m². It occurs in a habitat of conservation concern – ‘Pioneer thermophilic grass communities on calcareous rocky and stony places’ (01E1) (cf. Gushev & al. 2015), with clearly defined dry surfaces of the exposed limestone

rocks, and projective vegetation cover of about 35 – 40%. The plant community is relatively rich in species, with the most common taxa being *Sedum acre*, *S. album*, *Medicago minima*, *Melica ciliata*, *Bothriochloa ischaemum*, *Convolvulus cantabrica*, *Cruciata laevipes*, *Clinopodium acinos*, *Bromus arvensis*, *Festuca valesiaca*, *Erophila verna*, and other xerothermic calciphilous species from the union *Alyso-Sedion albi*. Single specimens of *Paliurus spina-christi* also occur. Adjacent, the habitat is bordered by dry grass steppe communities of *Festuco-Brometea*, on shallow degraded humus-carbonate soils, which include various orchids and medicinal plants, negatively affected by droughts in the past few years. Limiting factors for *A. leptophylla* are the dry and eroded terrain, as well as the characteristic shallow, calcareous soils, which are also a prerequisite for the difficult seed regeneration of the species. Anthropogenic pressure as well as livestock grazing in the area has been minimized in recent years. Based on our own observations and from the nearby locality in the ‘Kaletó’ area, we can conclude that the species is highly vulnerable to the competition of shrub and grass vegetation. One of the first reports of the species in the country, the one near Pliska town from 1910, remains unconfirmed until now, as well as those near the villages of Manastir and Venchan (Assyov & Denchev 2015). The locality in the ‘Kaletó’ area reported by Kuzmanov (1984) (SOM 146472, 146437) is situated on a relatively large area, fragmented, and represents a mosaic of grouped individuals, with one part of the population located along the route of the “Ovech Eco-Trail” as well as by a passing dirt road. The increasing anthropogenic pressure by tourism development, as well as the droughts caused by climate change, are the leading cause of the pressure on this locality. The population discovered in 1989 near the village of Kyulevcha (Andreev 1993, SOM 150637) is located in the westernmost part of the Provadiysko-Royaksko Plateau protected area. Efforts for the protection of existing populations should be directed mainly to additional studies on the biological features and ecological requirements of the species, as well as limiting the anthropogenic factor (trampling), especially in the locality in the ‘Kaletó’ area, leading to unfavorable changes in the habitat.

Report 61

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Asteraceae

61. *Pallenis maritima* (L.) Greuter (Fig. 12)

Gr Nomos Dodekanisou, Eparchia Rodou: island of Rodos, roadside near Zefyros estuary, 2–5 m, 36.428746°N, 28.233190°E, 18.04.2024, *Kalaentzis* obs. (photos).

Introduced. Native to Canary Islands, W and C Mediterranean. Reported from Greece as *Asteriscus maritimus* (Tutin 1976), the Rodos record is a recent confirmation.

Report 62

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Chenopodiaceae

62. *Beta vulgaris* subsp. *maritima* (L.) Arcang. (Fig. 13)

Gr Nomos Attikis/Viotias, Eparchia Megaridos/ Thivon: Mt Kitheronas, at side of the wind farm service road, rocky calcareous slopes, 1160 m, 38°11'N, 23°14'E, 23.07.2024, *D. Shaw* obs. (photos).

New for Mt Kitheronas. In nomos Attikis/Viotias, recorded from the summit of Mt Pastra. There were several plants growing by the roadside. The altitude of 1160 m is the highest reported for Greece, most collections and observations are from sea level or at altitudes less than 300 m. Distribution and spread to higher ground is probably a result of road building and vehicular traffic.

Reports 63–64

Kit Tan* & Gioula Drolapa

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Asteraceae

63. *Hieracium phocaicum* Zahn (Fig. 14)

Gr Nomos Fokidos, Eparchia Parnassidos: Mt Vardousia, Profitis Ilias, 1500–1600 m, 38°40'N,



Fig. 12. *Pallenis maritima* (photo K. Kalaentzis).



Fig. 13. *Beta vulgaris* subsp. *maritima* (photo D. Shaw)



Fig. 14. *Hieracium phocaicum* (photo G. Drolapa).

22°11'E, 03.07.2024, *Drolapa* obs. (photos; det. G. Gottschlich, July 2024).

New for Mt Vardousia. This species was described in *Pflanzenreich* (Engler 1921: 586) based on a specimen collected by Heldreich on Mt Parnassos (Nomos Fthiotidos, Eparchia Levadias: “in rupibus reg. alpinae m. Parnassi alt. 6000’ (Trypios – Vrachos etc)”, 18 August 1856, *Heldreich* 725 pp (labelled as 725b on sheet WU 0127079 in WU-Hal). It was referred to by Strid (2024a) as a taxon of uncertain status and overlooked in Strid (2024b).

64. *Inula bifrons* (L.) L. (syn.: *Pentanema bifrons* (L.) D. Gut. Larr. & al.) (Figs. 15 & 16)

Gr Nomos Fokidos, Eparchia Doridos: Mt Vardousia, Koprises plateau, 1750 m, 38°40'N, 22°07'E, 20.07.2024, *Drolapa* obs. (photos).

New for Mt Vardousia and first record for phytogeographical region Sterea Ellas in central Greece, also the southernmost occurrence of this species in the Balkan Peninsula. Its native distribution ranges from Spain to SE Europe. In Greece it was first reported from the Rodopi (Eleftheriadou 1992: 83), from Mt Tzena in the North East (Tan & Kofinas 2023a:130) and Kato Olimbos in North Central (Tan & Kofinas 2023b: 452). These new records (see Fig. 16) were not included in Strid (2024a: map 1074) due to a long printing delay.

Acknowledgements. We thank Günter Gottschlich (Tübingen) for kindly identifying *Hieracium phocaicum*.

Reports 65–72

Kit Tan* & Giannis Kofinas

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Caryophyllaceae

65. *Dianthus gracilis* Sm. subsp. *gracilis* (Fig. 17A & B)

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, rocky limestone on the ridge, 41°20'N, 23°28'E, 09.08.2022, *Kofinas* obs. (photos).

New for Mt Agistro. Petal limb dark red above, bearded at base.

66. *Dianthus viscidus* Bory & Chaubard (Fig. 17C)

Gr Nomos & Eparchia Fthiotidos: NW of Gavriani, cultivated fields, 407 m, 39°00'N, 22°50'E, 06.06.2020, *Sotiria Giannakopoulou* obs. (photos); *loc. ibid.*, 26.03.2018, *Kofinas* obs. (photos); *loc. ibid.*, 31.03.2024, *Kofinas* obs. (photos); road to Iera Moni Panagia, roadside vegetation, 400 m, 03.05.2024, *Kit Tan* & *G. Vold* 33270 (ATH).

Dianthus viscidus is a widespread and very variable species. These were suffrutescent plants more than 40 cm in height, with glandular and eglandular pubescent calyx and narrow, dark pink, unspotted petal limb



Fig. 15. *Inula bifrons* (photo G. Drolapa).



Fig. 16. Distribution of *Inula bifrons* in Greece.



Fig. 17A & B, *Dianthus gracilis* subsp. *gracilis* flower, basal and cauline leaves; C, *D. viscidus* flowers (photo G. Kofinas).

blotched or unblotched at base. Other plants from Mt Othris and Iti are lower in stature, with glabrous calyx and broad, dentate, white-spotted petal limb.

Fumariaceae

67. *Hypecoum torulosum* Å.E. Dahl

Gr Nomos Lakonias, Eparchia Epidavrou Limiras: island of Elafonisos, sandy and gravelly beach, 1 m, 36°29'N, 22°56'E, 23.04.2022, *Kofinas* s.n. (herb. Kit).

New for Elafonisos, only once reported from nomos Lakonias, at the beach of Kiparissia. On the island it was collected with ripe fruits together with *Saponaria jagelii* Phitos & Greuter, now regarded as a coastal ecotype of *S. calabrica* Guss. The prominent transverse ridge at each septum of the mature fruit results in a distinctive torulose appearance. The fruits of *Hypecoum procumbens* L. are without a prominent transverse ridge at each septum. Jagel (1992: 33) reported *H. procumbens* from the western part of the island.

Lamiaceae

68. *Stachys recta* L. subsp. *recta*

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, stony ground at roadsides, 622 m, 41°21'N, 23°28'E, 09.08.2022, *Kofinas* obs. (photos).

New for Mt Agistro. Corolla pale yellow, unspotted.

Papaveraceae

69. *Papaver albiflorum* (Elkan) Pacz. (Fig. 18)

Gr Nomos & Eparchia Fthiotidos: Mt Othris, *Quercus coccifera* scrub on rocky and stony limestone slopes, 39°01'N, 22°45'E, 03.05.2013, *Kofinas* obs. (photos).

New for Mt Othri; in nomos Fthiotidos, reported from Mt Iti.

Plumbaginaceae

70. *Goniolimon tataricum* (L.) Boiss. (Fig. 19)

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, old military outpost 'Stirigma Kalis', 41°21'N, 23°29'E, 09.08.2022, *Kofinas* obs. (photos); eparchia Visaltias: Nea Kerdylia, on mosquito-infested beach, sea level, 40°47'N, 23°50'E, 09.08.2022, *Kofinas* obs. (photos).

New for Mt Agistro.



Fig. 18. *Papaver albiflorum* (photo G. Kofinas).

Ranunculaceae

71. *Ranunculus neapolitanus* Ten.

Gr Nomos Lakonias, Eparchia Epidavrou Limiras: Mt Koulochera, on the ridge before Trypia Petra, limestone outcrops, 800–950 m, 36°49'N, 22°59'E, 22.04.2022, *Kofinas* s.n. (herb. Kit).

New for Mt Koulochera. Small single-flowered plants less than 10 cm tall and with deflexed sepals.

Rubiaceae

72. *Asperula sapphus* (Gutermann) Kit Tan, **comb. nov. Basionym: *Thlipthisa sapphus* Gutermann in PhytotKeys 241: 67 (2024).**

Gr Nomos & Eparchia Levkados: island of Levkas, 'Hangkante über der Westküste W-NW ober Aghios Nikolaos Niras (N-NE Akr. Dhokáto, ca. 8 km S-SW Atháni), meerseitige Kalkfelsfluren', 230 m, 38°35'N, 20°33'E, 24.05.2000, *Gutermann & al.* 35241 (ATH, K, LD, M, UPA, WU, herb. Gutermann).

A recently described local endemic from the southwest coast of Lefkada (Ionian islands, Greece), related to *A. baenitzii* Heldr. ex Boiss. (endemic to Attikis, Sterea Ellas) and *A. muscosa* Boiss. & Heldr. (restricted to Mt Olimbos). *Asperula* sect. *Thlipthisa* (Griseb.) Ehrend. was elevated to generic rank by Del Guacchio & Caputo (2020). Following Strid (2024a: 1414) and in



Fig. 19. *Goniolimon tataricum* (photo G. Kofinas).



Fig. 20. *Telekia speciosa* (photo Sister Pachomia).

preparation for a work on the endemic plants of the Greek islands, the generic name *Asperula* L. is maintained; this was graciously accepted by Dieter Reich (University of Vienna) without any objection.

Reports 73–84

Kit Tan* & Sister Pachomia

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Asteraceae

73. *Tephroseris papposa* (Rchb.) Schur

Gr Nomos Serron, Eparchia Visaltias: Mt Kerdilio, forest openings, 1050 m, 40°46'N, 23°37'E, 14.06.2024, *Sister Pachomia* & *al.* s.n. (herb. Mon-

astery of Timios Prodromos, Serres).

New for Mt Kerdilio and eparchia; in Serron, reported from Mts Beles, Menikio and Vrondous.

74. *Telekia speciosa* (Schreb.) Baumg. (Fig. 20)

Gr Nomos Serron, Eparchia Sintikis: Mt Beles, ascent from Mandraki village, by stream in forest opening, 1550 m, 41°18'N, 23°09'E, 21.07.2020, *Sister Pachomia* & *al.* s.n. (herb. Monastery of Timios Prodromos, Serres); *loc. ibid.*, 1235 m, 41°18'N, 23°09'E, 05.07.2022, *Sister Pachomia* & *al.* s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Beles. Occurring in damp meadows and openings of mixed *Picea-Fagus* forest in mountains of N Pindos, North and East Central, North East.

Boraginaceae**75. *Nonea atra* Griseb.**

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, fields, 315 m, 41°22'N, 23°27'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

Confirming reports from the same area but at the village.

Brassicaceae**76. *Alyssum montanum* subsp. *repens* (Baumg.) Schmalh.**

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, rocky limestone slopes, 989 m, 41°20'N, 23°28'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Agistro and eparchia Sintikis. Most stellate hairs on the lower surface of basal leaves had 16 bifurcate rays.

Caryophyllaceae**77. *Dianthus viscidus* Bory & Chaub.**

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, grassy slope with rocky limestone outcrops, 380 m, 41°23'N, 23°27'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Agistro. Suffrutescent plants more than 40 cm in height, with glandular and eglandular pubescent calyx and narrow, unspotted petal limb.

78. *Paronychia manfrediana* Kit Tan & Strid (Fig. 21)

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, limestone rock crevices, 555 m, 41°23'N, 23°30'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Agistro, nomos and eparchia. Second locality for Greece, previously only known from serpentine area near Dadia in nomos Evrou.

Hypericaceae**79. *Hypericum rumeliacum* Boiss. subsp. *rumeliacum***

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, stony limestone slopes, 563 m, 41°23'N, 23°30'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

Reported from Mt Tsigeli, the highest peak. Common on Mt Menikio and in the area of the Monastery.

Lamiaceae**80. *Stachys recta* L. subsp. *recta***

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, stony ground at roadsides, 622 m, 41°21'N, 23°28'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Agistro. Corolla pale yellow, unspotted.

Plantaginaceae**81. *Plantago media* L. subsp. *media* (Fig. 22)**

Gr Nomos & Eparchia Serron: Mt Menikio, meadows and open forest clearings, 1026 m, 41°10'N, 23°47'E, 28.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Menikio, nomos and eparchia. In the northeast, reported from Mts Falakro, Pangeo and the Rodopi. Distinct by its pubescent rosette leaves which do not dry black and by the pinkish or bluish-lilac filaments.

Ranunculaceae**82. *Delphinium fissum* Waldst. & Kit.**

Gr Nomos & Eparchia Serron: Mt Menikio, meadows and open forest clearings, on rocky ground, 940 m, 41°12'N, 23°46'E, 26.06.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Menikio, reported from several mountains in northeastern Greece (Falakro, Athos, Pangeo, Orvilos, Chortiatis, etc).

Thymelaeaceae**83. *Daphne kosaninii* f. *cleistogama* Kit Tan, Petrova & Ziel. (Fig. 23)**

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, grassy slope with rocky limestone outcrops at summit of Conoides peak, 1047 m, 41°20'N, 23°28'E, 22.05.2024, *Sister Pachomia* & al. s.n. (herb. Monastery of Timios Prodromos, Serres).

New for Mt Agistro, rare in northeastern Greece. Reported from Mts Pangeo, Beles and Menikio; also in SW Bulgaria and North Macedonia. A report from Kosovo has not been confirmed. Small shrubs with glabrous leaves and dark reddish-pink flowers with corolla lobes erect and held mostly close together, thus differing from the widely distributed *Daphne oleoides* which has



Fig. 21. *Paronychia manfrediana* (photo Sister Pachomia).



Fig. 22. *Plantago media* subsp. *media* (photo Sister Pachomia).

leaves hairy beneath and creamy-white, acute or obtuse, patent-spreading lobes. Fruit development was good.

Colchicaceae

84. *Colchicum autumnale* L.

Gr Nomos Serron, Eparchia Sintikis: Mt Agistro, sub-alpine meadow, in fruit, 1053 m, 41°20'N, 23°28'E, 06.06.2024, *Sister Pachomia* & *al.* obs. (photos).

New for Mt Agistro, nomos and eparchia. Also recorded from Mt Menikio.

Report 85–90

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Apiaceae

85. *Seseli degenii* Urum. (Fig. 24)

Bu Forebalkan (*Western*): Grozdov Kamak locality, Kalen village, Mezdra Municipality, Vratsa District, on the edge of calcareous rocks, 620 m, GN28, 43.213776°N, 23.769620°E, 10.03.2024, R. Tzonev obs.

This species is a regional endemic for part of Forebalkan (*Western*), southern end of the Danubian Plain and the Balkan Range (*Central*) floristic regions. It is included in the Red Data Book as “Vulnerable” (Dimitrov 2015). Confirming the occurrence of the species in this locality (first report by Velchev 1961) which is the westernmost one in Bulgaria. Several specimens in their initial stage of development and dry stems from the previous year were found on the top of limestone rocks of upper cretaceous age.

Papaveraceae

86. *Hypecoum imberbe* Sm.

Bu Danubian Plain: Loven park, dry meadows in the abandoned hunting park in the vicinity of Vidin town, Vidin District, 35 m, FP46, 43.963325°N, 22.837592°E, with flowers and fruits, 07.05.2024, coll. R. Tzonev & G. Kunev (SO 108311; BG-NMNHS-BOT-000000003787, 000000003788).

In the most recent accounts of the Bulgarian flora (Assyov & Petrova 2012; Stoyanov & al. 2021), this species was indicated with a question mark for the Danubian Plain floristic region. The current collection confirms



Fig. 23. *Daphne kosaninii* f. *cleistogama* in flower and in fruit (photo Sister Pachomia).



Fig. 24. *Seseli degenii* on Grozdov Kamak Locality, Kalen village (photo R. Tzonev)



Fig. 25. *Eranthis bulgaricus* on Venetsa Mt., 07.05.2024 (photo G. Kunev)

the occurrence of the species in this region. Two subpopulations were observed in the field. The first one is presented near the destroyed Hunter's Hut and the second one (43.968132°N, 22.843483°E) was found along the railway passing north from "Loven park" locality, both with numerous individuals.

Ranunculaceae

87. *Eranthis bulgaricus* (Stef.) Stef. (Fig. 25)

Bu Forebalkan (Western): Karneva Livada Peak, Venetsa Mt., above the TV tower, in the periphery of shrub communities dominated by *Acer monspessulanum*, *Syringa vulgaris*, *Carpinus orientalis* etc., Oreshets village, Dimovo Municipality, Vidin District, 880 m, FP33, 43.628488°N, 22.707265°E, in fruiting stage, 07.05.2024, coll. R. Tzonev & G. Kunev (SO 108310, BG-NMNHS-BOT-000000003786).

The species is protected under the Bulgarian Biodiversity Act. It was assessed as "Critically Endangered" (Vladimirov 2009, 2015), with the only known natural locality in Bulgaria on Vrashka Chuka Mt., on the Bulgarian-Serbian border. The first data for the occurrence of this species on Karneva Livada Peak (Venetsa Mt.) came by Todor Todorov and Georgi Gruev from

the Natural History Museum in Belogradchik, from late 1990s (about 1995, G. Gruev, pers. comm.). On 25.03.2000, some flowering plants were observed in this area by a group of biologists incl. Rossen Tzonev (Fig. 26). There is a credible information that this plant has been successfully introduced there (illegally), from Vrashka Chuka Mt. However, there is no any documentary confirmation for such activity. It is important to note the great similarity of the habitat of Venetsa with that of Vrashka Chuka – in both localities the plant is distributed on the periphery of scrub communities and on a small grassland on the top of a karst low mountain. In the spring of 2024, there was a population of about 300 individuals in an open space in the scrubland near GSM station. In 2019, second micropopulation consisted of dozens of individuals has been found in the open field on the Karneva Livada Peak. Special conservation measures are needed for this site, because it is an additional locality and suitable habitat for a critically endangered taxon in the Bulgarian flora. In close proximity, there is a small population of *Galanthus nivalis*, also protected and rare species. Part of the habitat and the population were partially destroyed at the end of the 1990s during the construction of a GSM operator station on the peak itself.

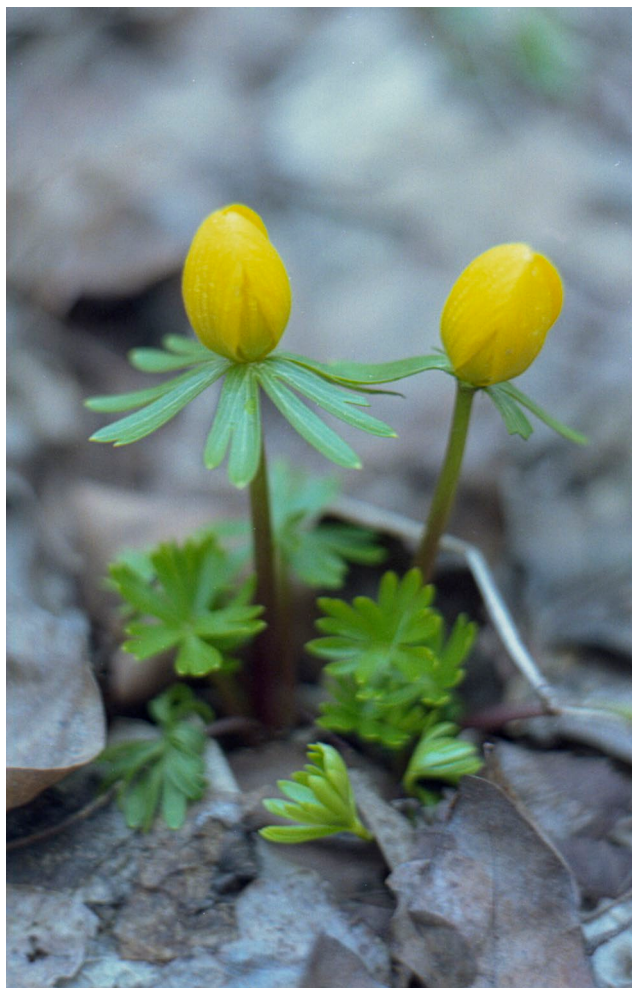


Fig. 26. *Eranthis bulgaricus* on Venetsa Mt., 25.03.2000, (photo Boris Nikolov)

Scrophulariaceae

88. *Scrophularia aestivalis* Griseb. (Fig. 27)

Bu Valley of River Struma (*Southern*): Krupnishki heights, Kresna Gorge, shaded rock crevices along a stream, Simitli Municipality, Blagoevgrad District, 430 m, FM73, 41.837082°N, 23.14601°E, 31.03.2024, in the beginning of flowering, coll. G. Kunev (SO 108312, BG-NMNHS-BOT-000000003146).

R. Tsonev and D. Dimitrov (SO 101610) were the first to collect the species in this floristic region on 07.06.2001, on the territory of Tisata Reserve. However, this data has not been taken into account in the most recent floristic summaries (Assyov & Petrova 2012, Stoyanov & al. 2021). The species has been found mainly in the montaineous and subalpine regions of

the country in the altitudinal range of 1000–2500 m (Stoyanov & al. 2021). The present population thrives at the lowest altitude ever recorded in Bulgaria. It consists of several groups of 3–7 individuals.

Iridaceae

89. *Crocus adamioides* Kernd. & Pasche (Fig. 28)

Bu Forebalkan (*Eastern*): Kairyaka locality, Hotnitsa village, Veliko Tarnovo Municipality, in shrub communities dominated by *Syringa vulgaris*, *Carpinus orientalis*, *Paliurus spina-christi*, etc on open karstic terrain, 208 m, LH87, 43.140136°N, 25.548294°E, 17.02.2024, with flowers, coll. R. Tzonev (SO 108289); Selishte locality, Lesicheri village, Pavlikeni municipality, Veliko Tarnovo District, in mesophilous pasture on the left riverbank of Rositsa River, 81 m, LH78, 43.212881°N, 25.441413°E, 24.02.2024, with flowers, coll. R. Tzonev (SO 108288, BG-NMNHS-BOT-000000003151).

This species was recently recorded in Bulgaria (Raycheva & al. 2021), having been known until now only from South Bulgaria – Thracian Lowland and Tundzha Hilly Country. Possibly the same is the taxon (Kiril Stoyanov, pers. comm.) published already (Apostolova & al. 2022) as *Crocus biflorus* agg. from Veliko Tarnovo (Preobrazhenski Monastery) and Dryanovo (Dryanovski Monastery) towns in Eastern Forebalkan region. The high ecological plasticity of the species found, both, on karstic terrains and on deep alluvial soils, suggests a wider distribution probably in more places in North-eastern Bulgaria. There is also numerous population of the protected species *Galanthus elwesii* (Fig. 29) especially in the locality near Hotnitsa village.

Orchidaceae

90. *Anacamptis papilionacea* (L.) R.M.Bateman, Pridgeon & M.W.Chase (Fig. 30)

Bu Danubian Plain: E and S from Archar village, Dimovo Municipality, Vidin District, in dry steppe-like grasslands, 80 m, FP55, 43.803470°N, 22.930144°E and 43.798927°N, 22.896043°E, in flower, 07.05.2024, R. Tzonev & G. Kunev obs.

The species is distributed in most of the floristic regions of Bulgaria (Stoyanov & al. 2021). However, no



Fig. 27. *Scrophularia aestivalis* at Kresna Gorge, 31.03.2024 (photo G. Kunev)

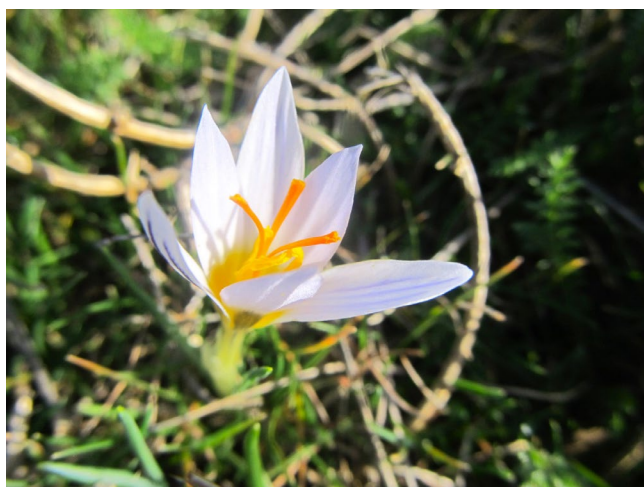


Fig. 28. *Crocus adamioides* in Selishteto Locality, Lesicheri village (photo R. Tzonev)



Fig. 29. Locality of Hotnitsa village, with populations of *Crocus adamioides*, *Galanthus elwesii*, and *Crocus flavus* (photo R. Tzonev)

records from the Danubian plain has been available up to now with exception of Urumov (1925), who has reported the species from the vicinities of Pleven town (the villages of Brestovets, Radishevo and Turnene) and Domozetski (2023) who reported the species

for the floristic region but did not provide specific localities. In this particular locality, 15 flowering individuals dispersed in several micropopulations were observed. It co-occurs with another species of conservation concern – *Achillea ochroleuca* Ehrh.



Fig. 30. *Anacamptis papilionacea* (with *Achillea ochroleuca*) near Archar village, Vidin district, 07.05.2024 (photo G. Kunev)

Reports 91–94

George Zarkos, Vasilis Christodoulou & Kit Tan*

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Apiaceae

91. *Torilis japonica* (Houtt.) DC.

Gr Nomos & Eparchia Korinthias: village of Ano Trikala, near a spring, 1057 m, 37°59'N, 22°27'E, 14.08.2023, Zarkos & Kounis obs. (photos).

Second report for Korinthias. First collected as *T. anthriscus* (L.) Gmel., in a wet ravine in oak forest near the monastery of Agios Giorgos of Pheneos (Maire & Petitmengin 1908: 93). Widespread on mainland Greece, less frequent in the Peloponnese.

Asteraceae

92. *Pulicaria odora* (L.) Rchb. (Figs. 31 & 31A)

Gr Nomos Arkadias, Eparchia Megalopoleos: between the villages of Kato Karyes and Kastanochori, *Quercus* forest, 390 m, 37°25'N, 22°03'E, 26.06.2024, Zarkos & Christodoulou obs. (photos).

Confirming the single record from Nomos Arkadias, made in 1995 and published in the report from the Seventh "Iter Mediterraneum" in the Peloponnese (Greuter 2012: 44).



Fig. 31. *Pulicaria odora* (photo V. Christodoulou).



Fig. 31A. *Pulicaria odora* (photo G. Zarkos).

Caryophyllaceae

93. *Silene christodoulou-zarkosii* Kit Tan & Vold (Fig. 32)

Gr Nomos Arkadias, Eparchia Megalopoleos: between the villages of Kato Karyes and Kastanochori, *Quercus* forest, 390 m, 37°25'N, 22°03'E, 26.06.2024, Zarkos & Christodoulou obs. (photos). New for eparchia Megalopoleos. A recently described, distinctive species extending its range in the Peloponnese from Nomos Achaïas to Nomos Arkadias where it was also found on the banks of the Lousios river in eparchia Gortinias. The type specimen was collected from the Mougosto forest in Nomos Korinthias.

Liliaceae

94. *Lilium chalcademicum* L. (Fig. 33)

Gr Nomos Arkadias, Eparchia Gortinias: northern slopes of Mt Likeo (Lycaio), *Pinus nigra* forest, 1133 m, 37°27'N, 21°59'E, 26.06.2024, Zarkos & Christodoulou obs. (photos).

New for Mt Likeo. *Pinus nigra* covers the upper northern slopes of the mountain but is probably planted.

Report 95

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Caryophyllaceae

95. *Dianthus biflorus* var. *pilosus* Zograf. & Dimitrellos var. nov. (Fig. 34)

Gr Nomos Achaïas, Eparchia Patron: Mt Panachaiko, Northeast slope, clearings of *Quercus-Abies* mixed forest and roadsides, 1000 m, 38°15'N, 21°53'E, 19.06.2024, Zografidis & Dimitrellos 901 (holotype: UPA39993; isotypes: ATH, ATHU, herb. Zograf.).

Diagnosis: A variety distinguished by an indumentum of short eglandular hairs and papillae on the flowering stems at least below.

Among the plants collected by the authors during field-works on Mt Panachaiko (North Peloponnese, Greece) in June 2024 were several specimens of *Dianthus biflorus* Sm., a mountainous Greek endemic reported from the mainland and the island of Euboea (Strid 1986,



Fig. 32. *Silene christodoulou-zarkosii* (photo V. Christodoulou).



Fig. 33. *Lilium chalcademicum* (photo G. Zarkos).



Fig. 34. Holotype of *Dianthus biflorus* var. *pilosus* kept at UPA and detail of a flowering stem on millimeter paper showing the indumentum

1997, 2024a). Examination of the collected plants under the lens revealed the presence of an indumentum of short, eglandular hairs and papillae on the flowering stems and leaf sheaths, especially on the lower part of the stems on most of the examined individuals (Fig. 34). *Dianthus biflorus* is typically glabrous (Strid 1986, 1997; first author's observations of numerous specimens deposited at UPA and ATH) and the material from Mt Panachaiko is here described as a variety new to science. *D. biflorus* was not mapped for Mt Panachaiko in Strid (1997, 2024a), however, it was reported by Kokkoris (2014) from this mountain. Hairy plants were also observed in material from Mts Chelmos in the N. Peloponnese (*Tzanoudakis et al.* X575 (UPA)) and Timfristos in Central Greece (*Stamatiadou* 3312 (ATH), *Dimitrellos* several collections (UPA)) where, like the situation on Mt Panachaiko, they coexist with subglabrous and glabrous individuals. Moreover, subglabrous specimens were noted in vouchers sheets from Mts Kaliakouda (*Stamatiadou* 3376 (ATH)) and Vardousia in Central Greece (*Stamatiadou* 3647 (ATH)). The lectotype of *D. biflorus* from Mt. Dirfis (Is. Euboea), kept at OXF, was found to be completely glabrous. However, a single individual from the same mountain, mounted along several other individuals on the same sheet, was papillose/shortly hairy (*Goulimis* 2313 (ATH)). It seems that there is no clear geographical element in the existence vs. absence of an indumentum in this species, however, it should be noted that the new variety is apparently absent from other mountains in the Peloponnese (Mts. Taygetos, Parnonas, Erimanthos and Killini). The morphologically related but clearly distinct *D. mercurii* Heldr. (examined material from Mt. Chelmos; *Goulimis* 2418 (ATH), *Zografidis* 916 (UPA, herb Zograf.)) was found to be densely papillose below, but additionally it is papillose above, at least on the bracts, epicalyx and calyx, whereas *D. biflorus* is always glabrous on epicalyx and calyx.

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