Article

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Additions to the Albanian flora: New taxa from the southeastern region

Abstract

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This contribution updates the distribution of three vascular plant taxa in various habitats and substrates within the Korça region in Southeastern Albania. Two of these: *Trigonella graeca* and *Aremonia agrimonoides* subsp. *pouzarii* are native to Albania, while *Trigonella caerulea* is a casual alien species likely introduced as an aromatic plant, many years ago with *T. foenum–graecum*. Both *A. agrimonoides* subsp. *pouzarii* and *T. caerulea* are reported here as new records for Albania; the former is a Balkan taxon and the latter is a cultigen originating from the Eastern Mediterranean, Mediterranean Europe, and Asia. Furthermore, a new Albanian southeastern locality and three southern unpublished ones are given for *T. graeca*, representing a significant expansion to the distribution range both within the country and across the Balkan Peninsula.

Key words: Floristics, alien flora, Drenova–Nikolica IPA, Kolonja, Albania.

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Introduction

The Korça region, situated in southeastern Albania, hosts two Important Plant Areas (IPAs), Drenova–Nikolica and Gramoz Mountain, which serve as vital refugia for endemic and relict flora (Shuka & al. 2011). They are characterized by a mountainous Mediterranean climate and various geological substrata, where: Drenova–Nikolica IPA, geologically is composed of Tertiary serpentine (ultramafic) rock (Fouache & al. 2009; Hoeck & al. 2014; Bani & al. 2017), while Gramoz Mountain IPA forms a natural extension of the Morava range (Frashëri & al. 1995; Aliaj & al. 1996) and is primarly composed of Upper Cretaceous limestones and Eocene flysch (Aliaj & Bushati 2019). These environmental and geographical characteristics allow the presence of varied natural habitats and of a range of rare and threatened flora (Pils 2016; Damo & Icka 2020), including significant Balkan endemics and species unique to Albania, such as: *Odontarrhena moravensis* (F.K.Mey) L. Cecchi & Selvi, *Acantholimon albanicum* O.Schwarz & F.May, *Festucopsis serpentini* (C.E.Hubb.) Melderis).

In this article we report *Trigonella caerulea* (L.) Ser. and *Aremonia agrimonoides* subsp. *pouzarii* Skalický as new additions to the Albanian flora, alongside a significant new locality record for *T. graeca* (Boiss. & Spruner) Boiss.

While *T. caerulea* is an introduced species, the latter two taxa are native. Notably, the occurrence of *A. agrimonoides* subsp. *pouzarii* a Balkan endemic with a restricted European distribution expands the known taxonomic diversity of the genus in Albania, limited to *A. agrimonoides* subsp. *agrimonoides* up to now. Detailed data on the occurrence, habitat and substrates for these taxa are provided.

Material and methods

Botanical field surveys were conducted in Kolonja municipality in June 2025, across Qafë e Kazanit (Gramoz Mountain), Qafa e Qarrit (Kolonja district), and the Boboshtica–Dardhë–Nikolica itinerary, where specimens of *Trigonella* L. and *Aremonia* Neck. ex Bernh. were collected from various habitats for further laboratory analysis. Taxonomic identification followed standard floristic sources: *Flora e Shqipërisë* (Qosja & al. 1992) and *Flora Europaea* II (Tutin & al. 1968). Nomenclature and distribution data were verified using: IPNI (2025), WFO Plant List (2025), Plants of the World Online (POWO 2025), and the Euro+ Med PlantBase (2006+). Voucher specimens (E.Gj. Ko-0084; E.Gj. Ko-0263; E.Gj. Ko-0347) are preserved and deposited in the private herbaria of E. Gjeta (Flora and Fauna Research Centre, Faculty of Natural Sciences, University of Tirana); formal deposit in the Tirana National Herbarium (TIR) is currently in progress. Other floristic sources for the Flora of Albania e.g. Barina & Pifkó (2009), Pils (2016, 2024), Barina & al. (2017, 2018), Ayvazyan & al. (2023), were also consulted.

Results and discussion

Trigonella graeca (Boiss. & Spruner) Boiss., Fl. Orient. 2: 91. 1872 (*Fabaceae*)

Studied specimen (Fig. 1a): Albania, Kolonja Municipality, Qarri Pass (Qafa Qarrit), open grassy area below a stony slope along the old Korçë–Ersekë road (Qafa Qarrit–Helmës segment), 40.465992 N, 20.669363 E, 940 m a.s.l., 2.6.2025, E.Gjeta. Ko-0084 (Herb. Gjeta).

The taxon was recorded at a single roadside locality where the population appeared very sporadic. Its first reports from Griba Mts. and Mal Bureto are by Barina & Pifkó (2009). The national distribution is limited to a few localities in southern Albania, typically in rocky limestone grasslands between 300 and 1500 m a.s.l. (Barina & al. 2017; Pils 2024).

Additional unpublished records (Nemerçkë Mts., Gjirokastër County):

- SW slope above Poliçan village, rocky scrub and grassland on limestone, on 15.5.2021, Barina Z. & Talás L. M. (40.131135 N, 20.367150 E, 1068 m a.s.l.; 40.131436 N, 20.367550 E, 1078 m a.s.l.);
- SW slope of Mt. Papingu, above Sopik, rocky grassland on limestone, 16.6.2021, Barina, Z. Talás, L. M. Mahilaj, M. Rama, A. (40.110178 N, 20.408160 E, 1344 m a.s.l.);

- East of Poliçan, dolomitic rocks, 7.6.2021, Barina, Z. Mahilaj, M. Talás, L. M. (40.134917 N, 20.370146 E, 1426 m a.s.l.).

T. graeca has been evaluated for the IUCN Red List in 2023 and is categorized as Least Concern (LC) at global, European, and Mediterranean levels (IUCN 2025).

Trigonella caerulea (L.) Ser., Prodr. 2: 181. 1825 (*Fabaceae*)

Studied specimen (Fig. 1b): Albania, vicinity of Korçë, vegetable field (tomato cultivation) approx. 200 m left of the Korçë–Voskopoja road, 40.620529 N, 20.757261 E, 840 m a.s.l., 10.8.2023, *E.Gjeta Ko-0347* (Herb. Gjeta).

This aromatic species is used for forage and cheese production, typically preferring disturbing habitats, agricultural or ruderal areas (Ayvazyan & al. 2023). In Korça region it is cultivated in pots or yards, mostly in the villages such as Kloca, Shëngjergji etc. No naturalized populations were previously recorded in Albania for this species. Our record consisted of 3–4 individuals in a habitat distant from rural gardens, suggesting either a spontaneous occurrence or accidental introduction via contaminated seeds. Its distribution range includes Europe and Russia (Euro+ Med PlantBase 2006+) and in Albania it was likely introduced alongside *T. foenum–graecum* many years ago, and remained undocumented due to extremely localized usage, only by a few number of local residents and villages (Arrëza, Kloca, Dvorani etc.). In order to prevent the plant distribution, the residents shared among them only crushed material (non-viable). Both species are locally known as “gruri i Qabesë” (the wheat of Kaaba) and were used mainly for flavoring baklava syrup.

Fig. 1. a. *Trigonella graeca* in Qarri Pass; b. *T. caerulea* in the vicinity of Korç (photos by E. Gjeta).

Aremonia agrimonoides subsp. ***pouzarii*** Skalický, Feddes Repert 79:36 (1968) (*Rosaceae*)

Studied specimen (Fig. 2): Albania, Korçë, Çezma e Lisecit or Çezma e Nikolicës, a few metres (5–10 m) to the right of Korçë–Boboshticë–Dardhë road, beech woodland, 40.519093 N, 20.795191 E, c. 1550 m a.s.l., 3.6.2025, *E.Gjeta Ko-0263* (Herb. Gjeta)

It represents a new taxon to the native Albanian flora, distinguished from *A. agrimonoides* subsp. *agrimonoides* by having a more robust, taller stem, larger petals, hypanthium etc. (Tutin & al. 1968).

It is a Balkan taxon, with a distribution range in Bulgaria and Greece (Euro+ Med PlantBase 2006+) and in North Macedonia (Flora Prespae Database 2025) within two locations. In Vladimirov & al. (2011), *A. agrimonoides* subsp. *pouzarii* was found through oak forest and reported as new for eparchia and nomos (historic administrative subdivisions).

The recorded population is well-established, covering an area of ca. 25–30 m^2. In the same habitat some accompanying species are: *Asphodelus albus* Mill., *Chaerophyllum temulum* L., *Fragaria vesca* L., *Dactylorhiza saccifera* (Brongn.) Soó, *Lathyrus pratensis* L., *Pulmonaria officinalis* L., *Geranium reflexum* L., *G. versicolor* L., *Blitum bonus–henricus* (L.) Rchb., *Rumex acetosa* L., *Pedicularis hoermanniana* K. Malý, *Symphytum tuberosum* L., *Lilium martagon* L., *Nepeta nuda* L., *etc.*

Fig. 3. *Aremonia agrimonoides* subsp. *pouzarii* in Çezma e Nikolicës (photos by E. Gjeta).

Conclusions

This article reports the occurrence in southeastern Albania, of *Trigonella caerulea* and *Aremonia agrimonoides* subsp. *pouzarii,* not previously recorded in the country's flora and a new location for *Trigonella graeca*, with very rare individuals and restricted distribution in the country. Within these occurrences, there are reported three unpublished localities for *T. graeca* (in south Albania), that altogether set up important data for this extremely rare species, strengthening and extending its northern distribution range in Balkans, from south

to southeastern Albania. Consequently, further field surveys are required for a comprehensive population assessment of *T. graeca.* While *T. caerulea* a new casual alien species for Albania, escaping from the many years of cultivation, represents an initial transformation from a cultivated plant to a casual alien species. Moreover, the discovery of the *A. agrimonoides* subsp. *pouzarii* enriches the Albanian native flora marks and underlines the regional connections (Bulgaria, Greece and North Macedonia) within similar ecological conditions, evidencing the Balkans floristic continuity.

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References

Aliaj, Sh. & Bushati, S. 2019: Look for the roots of the Mirdita ophiolites (Albania). – J. Nat. Tech. Sci. **2:** 1-27.

—, Melo, V., Hyseni, A., Skrami, J., Mëhillka, L. & al. 1996: Struktura neotektonike e Shqipërisë dhe evolucioni gjeodinamik i saj (Tekst shpjegues i hartës neotektonike të Shqipërisë në Shkallë 1:200.000). – Tiranë.

Ayvazyan, A., Stegemann, Th., Pérez, M. G., Pramsohler, M. & Çiçek S. S. 2023: Phytochemical Profile of *Trigonella caerulea* (Blue Fenugreek) Herb and Quantification of Aroma-Determining Constituents. – Plants **12(5):** 1154. https://doi.org/10.3390/plants12051154

Bani, A., Shallari, S., Gjeta, E., Mullaj A., Naqellari, P. & Meco, M. 2017: Field Trip Guide: Ultramafic Areas of the South-Eastern of Albania. 9th International Conference on Serpentine Ecology. – Tirana.

Barina, Z. & Pifkó, D. 2009: Data on the flora of Albania. – Pp. 578-582 in: Ivanova, D. (ed.), Plant, fungal and habitat diversity investigation and conservation. Proceedings of IV Balkan Botanical Congress, Sofia, 20 – 26 June 2006. – Sofia.

—, Mullaj, A., Pifkó, D., Somogyi, G., Meco, M. & Rakaj M. 2017: Distribution atlas of vascular plants in Albania. – Budapest.

—, Somogoy, G., Pifkó, D. & Rakaj, M. 2018: Checklist of vascular plants of Albania. – Phytotaxa **378(1):** 1-339. https://doi.org/10.11646/PHYTOTAXA.378.1.1

Damo, R. & Icka, P. 2020: A preliminary evaluation of the endemic and relict flora in Important Plant Area of Drenova-Nikolica, Albania. – Pp. 49-58 in: Çınar, Ö. (ed.), Proceedings of 6th the International Conference on Sustainable Development, November 4-8, 2020, North Macedonia. – Skopje.

Euro+Med PlantBase 2006+ [continuously updated]: Euro+ Med PlantBase – the information resource for Euro – Mediterranean plant diversity. – http://www.europlusmed.org [accessed 1/7/2025]

Flora Prespae Database 2025: Flora Prespae Database. – https://www.floraprespaedatabase.gr/en/aremonia-agrimonoides-subsp-pouzarii-p-2149.html [accessed 1/7/2025]

Fouache, E., Desruelles, S., Magny, M., Bordon, A., Oberweiler, C. & al. 2009: Palaeogeographical reconstructions of Lake Maliq (Korca Basin, Albania) between 14,000 BP and 2000 BP. – J. Archaeol. Sci. **37:** 525-535.

Frashëri, A., Nishani, P., Bushati, S. & Hyseni A. 1995: Geophysical study of the Albanides. – Boll. Geofis. Teorica Appl. **37(146):** 83-108.

Hoeck, V., Ionescu, C. & Onuzi, K. 2014: The Southern Albanian ophiolites. – Bull. Geol. Sci. **6:** 1-48.

IPNI 2025: International Plant Names Index. – https://www.ipni.org/ [accessed 17/6/2025]

IUCN 2025: The IUCN Red List of Threatened Species. Version 2025 – 1 https://www.iucnredlist.org. [accessed 12/7/2025]

Pils, G. 2016: Illustrated Flora of Albania. – St. Stefan.

— 2024: Illustrated Flora of Albania Version 1.01. – https://www.researchgate.net/profile/Gerhard-Pils/publication/378128808_ILLUSTRATED_FLORA_of_Albania_Update_101/links/65c84853790074549 76fbca2/ILLUSTRATED-FLORA-of-Albania-Update-101.pdf [accessed 17/6/2026]

POWO 2026: Plants of the World Online. – https://powo.science.kew.org/ [accessed 6/2/2026]

Qosja, Xh., Paparisto, K., Demiri, M., Vangjeli, J. & Balza, E. 1992: Flora e Shqipërisë, **2.** – Tiranë.

Shuka, L., Xhulaj, M. & Qirjo, M. 2011: Albania. – Pp. 65-69 in: Radford, E. A., Catullo, G. & Montmollin, B. de. (eds), Important Plant Areas of the south and east Mediterranean region: priority sites for conservation, **8.** – Gland & Malaga.

Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H. & al. 1968: Flora Europaea, **2.** – Cambridge.

Vladimirov, V., Dane, F. & Tan, K. 2011: New floristics records in the Balkans: 17. – Phytol. Balcan. **17(3):** 361-384.

WFO 2025: World Flora online. https://www.worldfloraonline.org/ [accessed 1/7/2025]

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