Flora of Greece
Volume 1
Apocynaceae: *Amsonia* (ed. 1)

First published online on 8 December 2023

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Source: Flora of Greece https://portal.cybertaxonomy.org/flora-greece/

Published by: Hellenic Botanical Society and Botanic Garden and Botanical Museum Berlin

DOI: https://doi.org/10.3372/fog.v1.apoc-amso.ed1

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Recommended citation:
Goula K. 2023: *Apocynaceae*: *Amsonia* (ed. 1). – In: Flora of Greece Editorial Committee (ed.), Flora of Greece Volume 1. – Athens: Hellenic Botanical Society; Berlin: Botanic Garden and Botanical Museum Berlin. https://doi.org/10.3372/fog.v1.apoc-amso.ed1

APOCYNACEAE
in part

Katerina Goula[1]

Amsonia Walter

Fl. Carol.: 98. 1788. Type: *Amsonia tabernaemontana* Walter. 22 species. In Greece, one species.

Description: Annual or perennial erect herbs, with latex. ***Leaves alternate, blades without colleters at base. Inflorescence a terminal corymbose or paniculate cyme.*** Sepals acuminate, without colleters at base within. Corolla blue or bluish, ***hypocrateriform***, with spreading lobes, overlapping to left in bud; tube cylindric, slender, widened above middle; ***throat hairy***. Corona absent. Stamens included, inserted on upper part of corolla tube; filaments short; anthers ovate or oblong, obtuse at base, without sterile basal appendages, free from style head; gynostegium absent. Distinct nectaries absent. Ovary composed of 2 free carpels, with numerous ovules, arranged in 2 series on each placenta; style filiform; style head with a thick ring of hairs at apex and collar at base. Fruit a pair of erect, cylindric-fusiform follicles. Seeds oblong-cylindric, obliquely truncate, glabrous, ***without coma***.

Literature: Markgraf (1972), Stearn (1978), Li & al. (1995), Endress & al. (2019).

General comments: The phylogeny of the genus is unresolved, particularly its relationship to *Rhazya* Decne., and needs comprehensive study (Potgieter & Albert 2001; Simões & al. 2007; Endress & al. 2014, 2019; Gürkanli & al. 2014).

1. *Amsonia orientalis* Decne.

In Jacquemont, Voy. Inde 4 (Bot.): 105. 1844. Homotypic synonym: *Rhazya orientalis* (Decne.) A. DC. Syntypes: "in Asiâ Minori, ad lacum Abouillonte", *Aucher-Éloy 2488* (BM001014022!, K000852976!, MPU022743!, P00645115!, P00645116!). [Heterotypic synonym (Euro+Med 2006+): *Rhazya thracica* Davidov.]

Description: Perennial, 30–60 cm tall, with erect stems. Leaves sessile or subsessile, c. 4 × 2 cm, lanceolate to ovate, cuneate or rarely rounded at base, acute or acuminate at apex, pubescent when young, glabrous at maturity, except for midrib and ciliate margin. Inflorescence terminal, usually many-flowered. Calyx lobes 2–3 mm long, lanceolate, acute, ciliate. Corolla hypocrateriform, pale blue or rarely lilac-blue, glabrous outside, hairy in throat; tube 10–15 mm long, darker than lobes, slightly widened in upper part; lobes 4–5.5 mm long, ovoid to obovoid or oblong, subobtuse at apex. Follicles erect, (3–)5–8 cm long; seeds 6–8 mm long, tuberculate.

Distribution: Rare in NE Greece and NW Turkey (Zahariadi 1973; Drossos 1992; Akyalçin & al. 2006; Kavak 2014). NE (Dimopoulos & al. 2013).

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Karyology: 2*n* = 22 (Van der Laan & Arends 1985; Aksoy & al. 2013).

Status	**Conservation status**		**Legal status**	
N, r	CR (IUCN)		Greek Presidential Decree	
Life form	**Functional trait**	**Chorology**	**Distribution in Greece**	
H	*	EM	NE	
Habitat	**Geology**	**Altitude**	**Flowering**	**Fruiting**
A	**	0–50 m	V–VI	

* Pollination by insects (bees and butterflies, Ollerton & al. 2019).
** Prefers slightly alkaline, mid-calcareous, sandy-loamy substrates, poor in organic material but rich in iron and magnesium (Özen & al. 2008).

General comments: Rich in indole alkaloids, glycosides and glycoalkaloids, cardioactive, anticancer, broad antimicrobial activity, ornamental (Bolzani & al. 1984; Akyalçin & al. 2006; Kavak 2014; Abdul-Hameed & al. 2022).

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