

TWO NEW SPECIES OF THE GENUS *VINCETOXICUM* (ASCLEPIADACEAE) FROM IRAN

M. Zaeifi

Zaeifi, M. 1999 08 01: Two new species of the genus *Vincetoxicum* from Iran. -*Iran. Journ. Bot.* 8 (1) 105-110. Tehran.

Vincetoxicum assadii and *V. mozaaffarianii* are described as new species from Iran. The differences with related species are also discussed. Probable related species to *V. assadii* are *V. tmoleum* Boiss. and *V. fuscatum* (Hornem.) Rechb. Fil. and those of *V. mozaaffarianii* are *V. stocksii* Ali & S. Khatoon, *V. sakesarensis* Ali & S. Khatoon and *V. arnottianum* (Wight.) Wight.

Mahmoud Zaeifi, Research Centre of Natural Resources, P. O. Box 79145-1468, Bandarabbas, Iran.

Key words. *Vincetoxicum*, *Asclepiadaceae*, Iran, new species.

دو گونه جدید جنس *Vincetoxicum* از ایران

محمود ضعیفی

گونه‌های *V. mozaaffarianii* و *Vincetoxicum assadii* به عنوان گونه‌های جدید از ایران نامگذاری و شرح داده می‌شوند. تفاوت‌های این گونه‌ها با گونه‌های نزدیک به آنها مورد بحث قرار می‌گیرد. گونه‌های احتمالی نزدیک به *V. assadii* عبارتند از *V. fuscatum* و *A. tmoleum*. گونه‌های احتمالی نزدیک به *V. mozaaffarianii* عبارتند از *V. stocksii*، *V. sakesarensis* و *V. arnottianum*.

Introduction

In a revision of the family *Asclepiadaceae* in Iran, the author has studied the materials of the Research Institute of Forests and Rangelands herbarium (TARI) among which came across two new species. The new species are described in this paper and probable relatives are mentioned.

***Vincetoxicum assadii* Zaeifi, sp. nov.**
(Fig. 1).

Perenne, suffrutescens, ad 50 cm altum vel magis, pluricaule. Caules erecti, puberuli. Folia opposita, 4-7x2-2.5 cm; inferiora ovato-lanceolata; superiora lanceolata, basi rotundata vel \pm cordata, apice acuminata, puberula, petioli 2-5 mm longi, puberuli. Flores singuli vel in cymae axillares, pauciflores (ad 4); peduncul 2-10 mm longus. Pedicilli 1-3 mm longi. Bractee breves. Calyx 2.5 mm longus, laciniis lanceolatis, 2.5x1 mm, extus pubescentibus. Corolla campanulata, lurida, 4-4.5 mm longa; lacinae oblongae, 2.5-3x1 mm, apice obtusae, intus pilosae. Corona lobis 5.

Typus. Kohgyluyeh and Boirahmad: between Iasuj and Dehdasht, Dilegun, Saverz mt., 2200-2300 m, Assadi & Abuhamzeh 46397 (holotypus TARI).

Perennial subshrub, to 50 cm tall or more,

many stemmed. Stems, erect, pubescent. leaves 4-7x2-2.5 cm; lowers ovate-lanceolate, acuminate, pubescent. Petiols 2-5 mm long, pubescent. Flowers single or usually clustered in up to 4 flowered axial cymes. Peduncle 2-10 mm long. Pedicels 1-3 mm long. Bracts more or less broad. Calyx 2.5 mm long, connate at base; lobes lanceolate to 2.5x1 mm, pubescent outside. Corolla campanulate, light brown, 4-4.5 mm long; tube 1.5-2 mm long, lobes oblong, 2-3x1 mm, obtuse, pillose inside. Corona consist of 5 tuberculate segments, 1x1.5 mm, equal to staminal column. Stamens opposite of corolla lobes. Staminal appendage membranous. Stigma pentagonal.

The new species seems to be related to *V. tmoleum* Boiss. But differs from it in following characters. Branches pubescent in all around, (not uniseriably) (see Browicz 1978 & Field 1980); leaves ovate-lanceolate to lanceolate and pubescent (not ovate to broadly ovate and almost glabrous); peduncle 5-10 mm long (not 11-20 mm long); bract broad (not filiform); calyx pubescent (not subglabrous, but hairy at base); corolla light brown (not creamy); corolla lobes oblong, obtuse (not narrow ovate). *V. fuscatum* (Hornem.) Rechb. fil. is another relative but differs in having



Fig. 1. *Vincetoxicum assadii* (x0.68); flower (x6.8).

petiols 2-5 mm long (not to 10 mm) (see Browicz 1978); cyme obviously pedunculate (not sessile) and corolla light brown (not dark brown).

***Vincetoxicum mozaffarianii* Zaeifi, sp. nov.** (fig 2).

Perenne, suffrutescens, ad 50 cm altum vel magis, pluricaule. Caules puberuli. Folia opposita, (2.5) 5-8 cm longa et 15-28 mm lata, ovato-lanceolata vel lanceolata, puberula, basi \pm cordata; inferiora apice rotundata; superiora acuminata, acuta vel caudata. Petioli 2-3 mm longi. cymae axillares, pedunculis 2-5 mm longis, pubescentibus. Pedicilli 2-4 mm longi, pubescentes. Calyx 2-2.5 longus, lobis ovatis, apice acutis, 1.5-2 \times 1 mm, extus pubescentibus. Corolla campanulata, atrobrunnea vel atropurpurea, 4(-5) mm longa. laciniae deltoides 2(-3) \times 1 mm, \pm acutae, intus pubescentes, apice \pm contortae. Corona lobis 5; lobi late deltoides, tuberculati, obtusi, a gynostegio \pm longioribus. Gynostegium 0.75 mm longum.

Typus. Hormozgan: N. slope of Bokhan mnt., N. to Fareghan village, 1500-2000 m, Mozaffarian 44797 (holotypus TARI).

Perennial subshrub to 50 cm tall or more,

many stemmed. Stems pubescent. Lower internodes 6-7 cm long; upper internodes 1-2.5 cm long. Leaves opposite, (2.5) 5-8 cm \times 15-28 mm, ovate-lanceolate to lanceolate, both sides pubescent, subcordate or cordate at base; lower leaves rounded at the apex; upper leaves acuminate, sometimes acute or caudate. Petiols 3-5 mm long. Inflorescences consist of axial cymes, peduncles 2-5 mm long, pubescent. Bracts 1-2 mm long, ovate-lanceolate to lanceolate, pubescent. Pedicel 2-4 mm long, pubescent. Calyx 2-2.5 mm long, 5 lobed; lobes deeply divided almost to the base, 1.5-2 \times 1 mm, ovate, acute, densely pubescent outside. Corolla campanulate, dark brown to purplish, 4(-5) mm long; tube 2 mm long; lobes deltoid 2(3) \times 1 mm, subacute, densely hairy inside, tips almost twisted. Corona consist of 5 segments; segments broadly deltoid, tuberculate, obtuse, more or less longer than the staminal column. Staminal column 0.75 mm long; anther tips membranous, broad. Stigma conical, pentagonal, almost covered by anther tips.

The new species seems to be related to *V. stocksii* Ali & S. Khatoon, but it differs in having leaf base subcordate to cordate (not roundish to cuneate) (see Ali 1982 & 1983); calyx 2-2.5 mm long (not 1.5 mm);



Fig. 2. *Vincetoxicum mozaffarianii* (x0.53); flowers (x5.3).

calyx lobes 1 mm broad (not 0.5 mm); corolla lobes almost as long as the tube (not 2 times longer), subacute and somewhat twisted at the apex (not retuse and not twisted at the apex); corona lobes broadly deltoid and slightly longer than the staminal column (not linear to ovate) and much longer than the staminal column; peduncel 2-5 mm long (not more than 10 mm).

The new species seems to be also related to *V. sakesarensis* Ali & S. Khatoon but it differs in having leaves with subcordate to cordate base (not cuneate) (see Ali 1982 & 1983) and pubescent on both sides (not glabrous); calyx lobes ovate, 1 mm broad (not narrow lanceolate and 0.5 mm broad); corolla dark brown to purplish (not brown); corolla lobes almost as long as the tube (not nearly 3 times longer); corona lobes equal to longer than the staminal column (not equal to shorter); anther tips broadly deltoid (not narrowly deltoid). Finally, the new species differs from *V. arnottianum* (Wight) Wight in having leaf base

subcordate to cordate (not cuneate) (see Rechinger 1970 and Ali 1982 & 1983); cyme more or less lax (not dense and almost globose); peduncle 2-5 mm long (not absent), corona lobes tuberculate and convergent (not non-tuberculate and divergent).

Acknowledgement

Thanks to Mr. E. Moradi, the artist of the Research Institute of Forests and Rangelands for drawing the illustrations.

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