

## STUDIES ON THE FLORA OF IRAN, NEW SPECIES AND NEW RECORDS

V. MOZAFFARIAN

Research Institute of Forests and Rangelands,  
P. O. Box 13185-116, Tehran, Iran.

### Abstract

*Cerasus yazdiana*, *Convolvulus kurdistanicus* and *Dionysia khatamii* are described as new species, *Chesneya rytidosperma* is reported as a new record for Iran and more information about the distribution of *Frangula alnus* Mill., in Iran are added.

### Introduction

In the course of studies on the Iranian plants in the field and the herbarium of Research Institute of Forests and Rangelands (TARI), some species new to science have been discovered and a new record for the Flora of Iran is added.

### New species

*Cerasus yazdiana* Mozaffarian sp. nov.

### Fig. 1

Frutex erectus usque ad 2 m altus. Rami tenues elongati recti vel curvati, juveniles albo-griseus vel purpureo-violascens, glabrescentes. Stipulae subulatae, laciniato-dentatae, quam petioli longiores, hirsutae, demum deciduae. Folia magnitudine variabilia, linearo-oblonga, obovato-spathulata, elliptico-ovata vel late ovata, latitudine 1-2 plo longiora, apice acuta vel acuminata, basi cuneata vel rotundata, margine omnino serrata vel duplicata-serrata, heterochroma, supra glabra, laete viridia, subtus crispule villosa, albo-viridia, petiolata; folia macroblastorum variabilia, usque ad 2.5×1-3 cm, ea brachyblastorum variabilia, 1.5-4×3-15 mm, costa mediana et nervi laterales supra ± conspicua, subtus prominentes. Petioli usque ad 3-5 mm longi, pubescentes. Flores 1-2. Pedicelli ± ca. 14 mm longi. Petala alba usque rosea. Hypanthium et ovarium glabrum, cylindricum, basi non ventricosum. Stylus-hirsutus. Sepala intus tomentosa. Drupa elliptica, glabra, 6-8×4-6 mm, demum atro-rubrescentes, ± dulcis. Putamina ovoidea, usque ad 8×5 mm, ± reticulato-rugosa

**Typus:** Yazd, Mehriz, Kuh-e Lakhese from Damgahan valleys, 2100-2400 m, V. Mozaffarian 77504, 79251 (Holotypus TARI).

**Paratypus:** Yazd, Mehriz, Kuh-e Lakhese from Damgahan valleys, 2100-2400 m, V. Mozaffarian 79251 (TARI) was collected one year later and sooner at spring.

Erect shrub, up to 2 m, twigs thin, elongated, erect or recurved. Young shoots whitish-grey or purple, becoming violet, glabrous. Stipules subulate, lacinate-dentate, longer than petioles, hirsute, finally deciduous. Leaves linear-oblong, obovate-spathulate, elliptic-ovate or broadly ovate, 1-2× as long as broad, acute or acuminate, cuneate or



Fig. 1. *Cerasus yazdiana* Mozaff.-Mozaffarian 79251

A. fruiting branch x 1, B. hypanthium x 1, C. fleshy stone, x 1, D. opened hypanthium x 1.

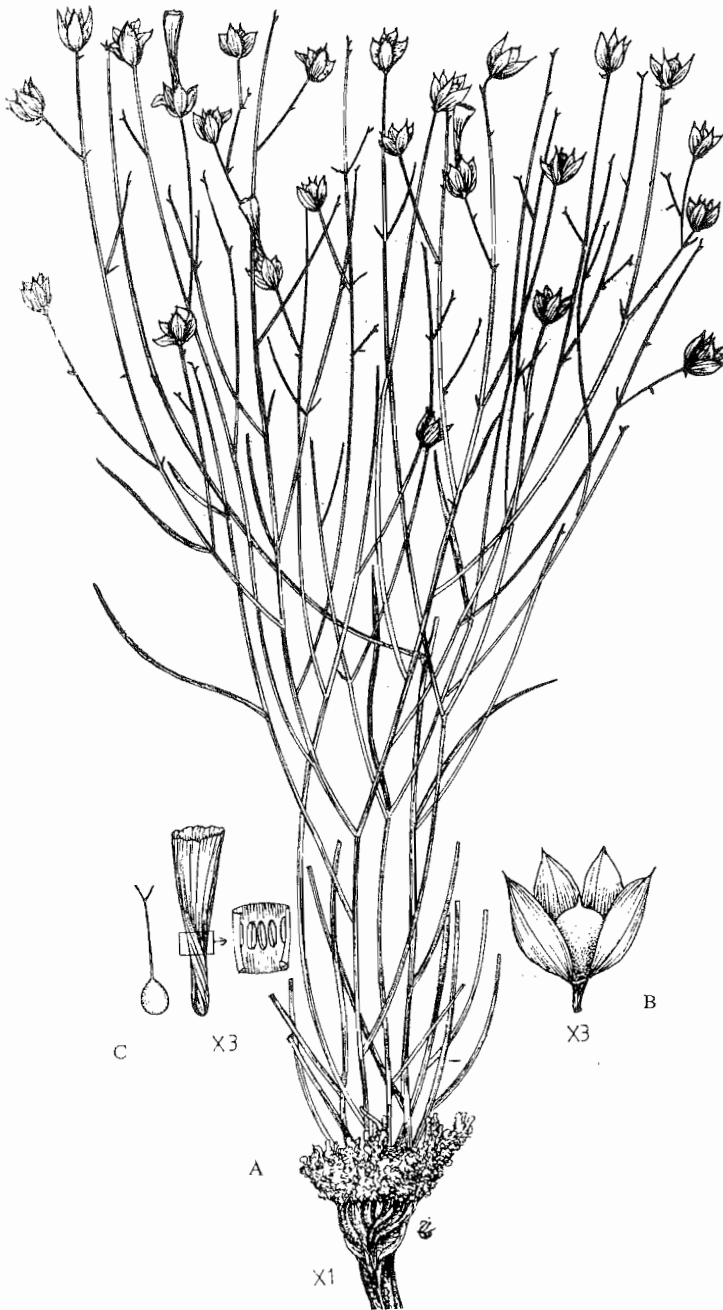


Fig. 2. *Convolvulus kurdistanicus* Mozaff.-Mozaffarian 79475  
A. habit x 1, B. calyx and capsule x 3, C. style and corolla tube and anthers x 3.

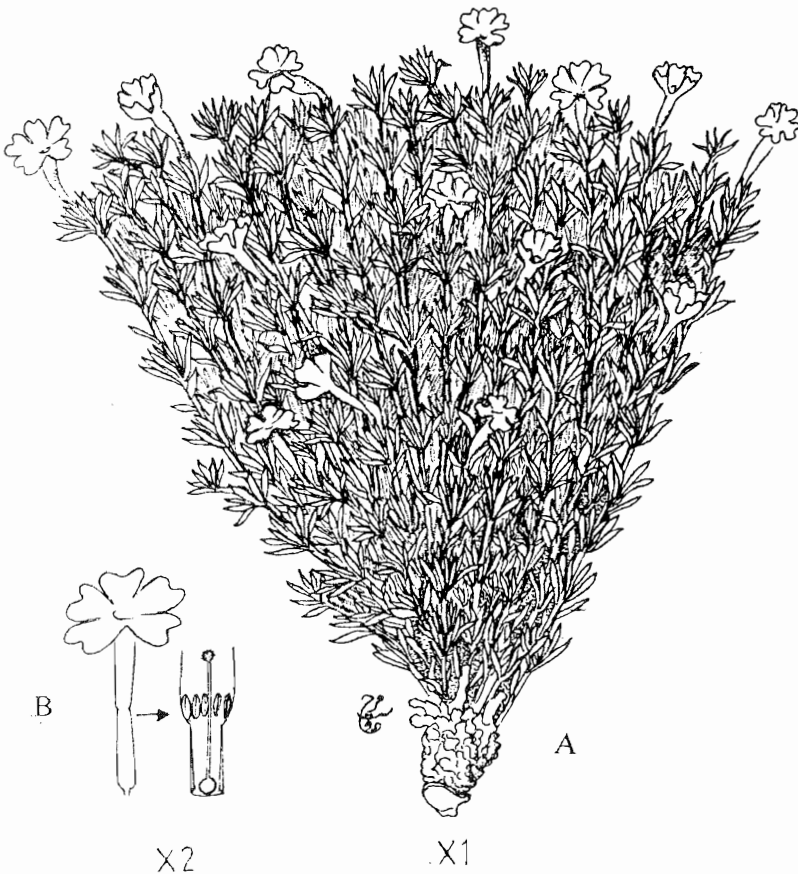


Fig. 3. *Dionysia khatamii* Mozaff.-Mozaffarian 79250  
 A. habit x 1, B. corolla tube and anthers x 2.

rounded at base, serrate or doubly serrate, discolor, light green, glabrous above, crispule villose and whitish green below, on long shoots variable, 2-5×1-3 cm, on short shoots variable, 15-40×3-15 mm main and laterale nerves ± conspicuous above, prominent below. Petiole 3-5 mm, pubescent. Flowers 1-2; pedicels ± up to 14 mm. Petals white to reddish. Styles hirsute. Hypanthium and ovary glabrous, cylindric, not swollen at base. Sepals tomentose at inner side. Drupe elliptic, glabrous, 6-8×4-6 mm, becoming dark red. Stone ovoid, up to 8×5 mm, ± reticulate- wrinkled.

The new species belongs to Sect. *Microcerasus* Spach, and differs from *Cerasus microcarpa* in having hirsute style, non ventricosous calyx, and ± deciduous stipules in brachyblastom and usually larger leaves.

**Distribution:** Known from type locality only.

***Convolvulus kurdistanicus* Mazaffarian sp. nov.****Fig. 2**

Planta herbacea; caudex lignosus, crassus, multicaulis. Caulis 30-50 cm altus, herbaceus, numerosis, sericeo-pilosus. Folia basalia mox decidua; caulina lineario-filiformia, 2-4 cm longa, sericeo-pilosa, integra. Inflorescentia monochasium, 3-5 flora. Bracteae lineario-triungulares, acutae. Bracteolae bractei similia sed minora, pedicello 2-3 plo breviorae. Pedicellus sepalo 2 plo breviora. Sepala glabra, mucronata, 8 mm longa, exteriora late ovata, purpurascensio-brunnea, nervosa, interiora  $\pm$  membranacea, ovato-rhomboida, acuta ad mucronata. Corolla alba, ad 18 mm longa, ad angulos sericea; calyce ca. 2 plo longiora. Stamia unequalia, longiora 4 mm longa. Filamenta glabra; antherae sagittata, basifixae. Ovario glabra, ovoidea, ad basalia discoidea. Capsula glabra, unilocularia, monosemina.

**Typus:** Kermanshah: 5 km from Salase-Babajani to Kanirash to Azgale 1200 m, V. Mozaffarian 79475 (Holotypus TARI).

Herbaceous plant, rootstock woody, thick, many-stemmed. Stems 30-50 cm high, herbaceous, numerous, sericeous. Basal leaves soon deciduous, cauline leaves linear-filiform, 2-4 cm long, sericeous, simple. Inflorescence monochasium, 3-5 flowered. Bracts linear-triangular, acute. Bracteoles similar to bracts but smaller, 2-3  $\times$  shorter than pedicels. Pedicels 2 $\times$  shorter than sepals. Sepals glabrous, mucronate, 8 mm long, outer ones broadly ovate, becoming pinkish-brown, nerved, inner ones  $\pm$  membranaceous, ovate-rhomboid, acute to mucronate. Corolla white, up to 18 mm long, each segment with a hairy band on the outside, ca. 2 $\times$  longer than sepals. Stamens unequal, the longest one 4 mm. Filaments glabrous, anthers sagitate, basifixed. Ovary glabrous, ovoid, at the base discoid. Capsules glabrous, unilocular, one-seeded.

The new species because of many stemmed and short sericeous hairs and very narrow leaves are  $\pm$  an isolated species in Iran, the nearest relative to the new species is *Convolvulus pseudocantabricus*

***Dionysia khatamii*\* Mozaffarian sp. nov.****Fig. 3**

Caespites laxiusculi, efarinosi virides, ramis tenuis longioribus, ramosi, foliis marcescentibus  $\pm$  fasciculati obsiti. Folia viva 6-8 $\times$ 1 mm, lineario-lanceolata, apice acuto-mucronulata, integra, non revoluta, viridia, supra  $\pm$  pilis articulatis sparse et glandulis sessilis obsita, subtus  $\pm$  glabra,  $\pm$  fasciculata. Flos solitarius, sessilis. Bracteis binis linearibus  $\pm$  hirsutis suffultus. Calyx 4-5 mm longus, ad 3/4 in lobus hirsutus divisus. Corolla violacea usque rosea. Limbus ca. 10 mm diametro, lobis obcordatis, emarginatis. Tubus 8-10 mm longus, pubescens. Capsula 4 sperma.

**Typus:** Yazd, Mehriz, Darre Damgahan 2400-2550 m, in deep granitic stone wall, flower pale pink, V. Mozaffarian 79250 16. 5. 1990 (Holotypus TARI, Isotypus UPS.).

**Paratypus:** Yazd Mehriz, Darre Damgahan 2400-2550 m, V. Mozaffarian, 77634.

\*Dedicated to M. Khatami the honourable President of Iran from Yazd province.

Plants forming rather loose cushions, efarinose, green. Stems thin, long, branched, covered by dead lax fasciculate leaves. Leaves  $\pm$  fasciculate, 4-10 mm. long, 1 mm wide,

linear-lanceolate, the apex acute-mucronulate, entire, the margin entire, not revolute, green above, covered by  $\pm$  spreading articulate and sessile glandular hairs, beneath  $\pm$  glabrous to rather hairy. Flowers solitary, sessile. Bracts 2, linear  $\pm$  hirsute. Calyx 4-5 mm long, divided for 3/4 of its length into hirsute lobes. Corolla violet to red, limb ca. 10 mm diameter, the lobes obcordate, emarginate, tube 10-14 mm long, pubescent. Anthers in long-styled flowers inserted in the middle of the corolla tube. Capsule with 4 seeds.

The new species because of special form of leaves is isolated in the genus *Dionysias*. It differs from *D. janthina* from Yazd by shape of leaves and non dense cushion, and from *Dionysia curviflora* by hairy corolla tube at outer side, leaf shape and non dense cushion.

### New records

#### 1. *Chesneya rytidosperma* Jaub. & Spach

Kermanshan: ca. 14 km from Gilan-e gharb to Sumar 980 m V. Mozaffarian 79517. The species is new to Iran, according to Rechinger (1984) the general distribution of the plant is in Anatolia, Syria, Iraq.

#### 2. *Frangula alnus* Miller (Rhamnaceae)

Kurdistan: Kamyaran, ca. 5 km from Kamyaran to Sanandaj 1600 m, V. Mozaffarian 79464 TARI.

Geographical distribution of this small tree is known from Northern part of Iran (Rechinger, 1977). The new collection from Kurdistan shows that the distribution pattern of this curious species extend to Kurdistan. It may be mentioned that Townsend (1980) confirmed the above distribution range.

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