NEW SPECIES AND NEW RECORDS OF ALCEA
FOR THE FLORA OF IRAN

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The new species Alcea ghahremanii is described from NW of Iran and two species are new records for the flora of Iran. They are including Alcea arbelensis from West and A. kopetdaghensis, from NE of Iran. Geographical distribution of the species are discussed.

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Key words. Alcea, New record, Malvaceae, Taxonomy, Iran.

یک گونه جدید و گزارش‌های جدید از جنس Alcea برای فلور ایران

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گونه به عنوان گونه جدید از آذریپایان معرفی شدند و با داشتن Alcea ghahremanii برچه‌های بدون باله و گل‌آذین خوشه گرزن از قوتهای نزدیک خود مثل A. fasciculiflora مجری می‌شود. گونه‌های زیبای اولین بار از ایران گزارش می‌گردد. A. flavovirens و Alcea arbelensis Boiss. & Hausskn., A. kopetdaghensis Iljin.

گونه اول از غرب و شمال غربی و گونه دیگر از استان خراسان جنوبی قرار می‌گیرد. انتشار
INTRODUCTION
The species of the genus *Alcea* (*Malvaceae*) are widely distributed through SW Asia. This genus has almost 70 species in the world and 34 species in Iran (Pakravan 2001). In the course of 4 years research on the taxonomy of the genus *Alcea*, many specimens of several herbaria (W, BM, P, JE, E, TARI, IRAN, TUH) were studied. This article contains one new species and two new records for the flora of Iran.

NEW SPECIES
*Alcea ghahremanii* Pakravan & Assadi, sp. nov.
Planta biennis vel perennis, ramosa, usque ad 150 cm alta. Caulis striatus, ut folia laxe pilis stellatissimis tectus ut videtur subglaber esse. Folia inferiora longissime petiolata; petioli 8-15 cm longi; lamina usque ad basin in lacinias 7 acutis, angustis divisa, supra glabra, subtus pilis stellatissimis obsita. Inflorescentia in parte inferiore paniculata, ceterum ramosa. Pedicelli usque ad 25-30 mm longi. Flores bini vel terni. Involucrum laciniae 6-7, triangulares, in dimidio inferiore connatae, 1/3 longitudinis calycis attingentes, pilis stellatissimis appressis obsitae. Petala sulphurea, calyce 2.5-3 plio longiora. Fructus e carpellis 26-28 compositus; carpella 5-6 mm longa, exalata, in dorso obtuse plana, pilis stellatis, in lateribus profunde foveolato-rugosa, breviter pilosa.


Alcea ghahremanii is closely related to *A. flavovirens* (Boiss. & Buse) Iljin, but differs from it by having wingless carpels (winged in *A. flavovirens*) and thyrsoid inflorescence (raceme in *A. flavovirens*). It is also related to *A. fasciculiflora* Zohary but differs from it by having yellow flowers (pink in *A. fasciculiflora*) and wingless carpels (winged in *A. fasciculiflora*).

NEW RECORDS TO IRAN
*Alcea arbelensis* Boiss. & Hausskn.
Kermanshah: near Gahvareh, 1600 m, Assadi 78746; Lorestan: ca 40 km S of Doroud at Bisheh,1250-1600 m, Assadi & Mozaffarian 37006; Chaharmahal-e Bakhtiari, road from Lordegan to Dourahan, Pol-e Abvanak,1800 m, Mozaffarian 54910.

This species was originally described from Iraq and it was not included in Flora Iranica (I. Riedl 1976). But it is a widespread species and distributed from West to NW of Iran.

The flower color was described as sulphur but it is cream in type specimen. It could have been white in fresh condition, but turned to cream in dry condition. Moreover Townsend (1980) described flower color as cream, yellow and pink.

*Alcea kopetdaghensis* Iljin
Khorassan: Ghuchan, Emam-gholi to Bajgiran, Tang-e close to Darebadam, 1480 m, Mozaffarian & Maassoumi 79137.

A new record for the flora of Iran. Previously it was known only from the type location (Iljin 1949).
The flowers described as solitary or paired in original description but in this specimen flowers are two or three in the lower part of raceme and single or paired in upper part of raceme. Moreover the flower color are described as pink, and lilac in dry condition. But there is a polymorphism in the flower color, which varies from white to pink.

The back of the carpel is described as flat in the original description, but in this specimen it is somewhat keeled. It seems this character varies in age, somewhat keeled in young but flat in old stage.

REFERENCES
Riedl, I. 1976: Malvaceae in K. H. Rechinger, Flora Iranica no.120. -Graz.
Fig. 1. *Alcea ghahremanii* (x 0.56); carpel (x 2).