

A NEW COMBINATION AND THE NEW RECORDS OF THE GENUS ZYGOPHYLLUM

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Akhiani, Kh. 1991 02 11: A new combination and the new records of the genus *Zygophyllum*. - *Iran. Journ. Bot.* 5(1): 41-46. Tehran.

Zygophyllum atriplicoides is a variable species. Evidences are shown that *Z. eurypterum* is synonym of *Z. atriplicoides*. *Z. megacarpum* is reduced to a varietal rank and the new combination *Z. atriplicoides* var. *megacarpum* is made. *Z. qatarense* with mostly unifoliolate leaves is recorded from S. Iran as a very common species. *Z. miniatum* var. *miniatum* is recorded from Iran for the first time.

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یک ترکیب جدید و گزارشهای جدیدی از جنس *Zygophyllum*

از: خدیجه اخیانی

گونه *Zygophyllum atriplicoides* از نظر شکل ظاهری گونه‌ای متنوع است. شواهد نشان می‌دهد که گونه *Z. eurypterum* مترادف گونه مذکور است. گونه *Z. megacarpum* به سطح واریته تقلیل می‌یابد و ترکیب جدید *Z. atriplicoides* var. *megacarpum* ساخته می‌شود. گونه *Z. qatarense* با برگهای غالباً تک برگچه‌ای از جنوب ایران بعنوان گونه‌ای فراوان معرفی می‌گردد. واریته *Z. miniatum* var. *miniatum* برای اولین بار از ایران گزارش داده می‌شود.

Introduction

Revising the genus *Zygophyllum* for the Flora of Iran revealed evidences for some changes in the taxonomic position of some taxa. A new combination seemed to be necessary to make. Also new records for the flora of Iran were known. The new combination and the new records are explained.

New combination

In majority of Floras, *Zygophyllum eurypterum* is known as a species having fruits with 4 wings and *Z. atriplicoides* and *Z. megacarpum* as species with 5 wings on their fruits. Referring to existing specimens in herbaria of Plant Pests and Diseases Research Institute (EVIN) and Research Institute of Forests & Rangelands (TARI) and inspections of living specimens around Kuh-e Genu in Hormozgan province, have revealed that, although in specimens, the number of wings of fruit is constant, but in the most cases wing numbers of specimens ranges from 3 to 5. It is also concluded that there is no correlation between shape, size of leaves and fruits. On the other hand flowers appear in white and yellow colour. Therefore these characters mentioned above, are not reliable for distinguishing them as distinct species. With these variations conclusions are as following.

Zygophyllum atriplicoides Fisch. & C.A. Mey., Ind. Sem. Horti Petrop 1:41 (1835).

Syn. *Z. eurypterum* Boiss. & Buhse., Novv. Men. Nat. Mosc. 12: 49(1860).

1. Fruit more than 30 mm. in diameter.
var. *megacarpum*

2. Fruit up to 30 mm in diameter.
var. *atriplicoides*

-- var. **atriplicoides**

Syn.: *Z. atriplicoides* Fisch. & C.A. Mey. subsp. *eurypterum* M. Pop. Bjuu. Srende Azitask. Gousd. Univ. 12:119(1926); *Z. gontscharowii*, Boriss. Fl. USSR. 14:729(1949); *Z. eurypterum* Boiss. & Buhse subsp. *gontscharowii* (Boriss.) Hadidi in K.H. Rechinger Fl. Ir. 98:24(1972); *Z. zonuzensis* Sabeti, Forests, Trees and shrubs of Iran; 783(1976), nom. nud.

-- var. **megacarpum** (Boriss) Akhiani, **comb. nov.**

Syn.: *Z. megacarpum* Boriss. Fl. USSR. 14:730(1949).

New Records

Zygophyllum qatarense Hadidi in Boulos, Webbia 32:394-395 (1978).

The nearest species to this *Zygophyllum*, is *Z. propinquum*. It is recognized by having cylindrical bifoliolate leaves. While in *Z. qatarense* most leaves are unifoliolate with obconical shape. It seems all specimens determined under the name of *Z. propinquum*, in fact are *Z. qatarense*.

Distribution: Qatar, Oman, United Arab Emirates, Saudi Arabia, Bahrain, Kuwait, Iraq and Iran.

Iran: Hormozgan: 15 km W. of Bandar-e Charak, sea level, Assadi & Akhiani 61995; ca. 100 km SEE of Lar. near the Sartang village, 300 m, Assadi & Sardabi 41925; Bandar-Abbas: Queshm, S. of Dargahan, 40 m, Wendelbo & Foroughi 15598; Khonosorkh, 20 m, Mozaffarian 49315; Nakhle Nakhoda, 10 m, Mozaffarian 45054; Between Bandar-e Charak and Rostagh, 50 m, Mozaffarian 49417; Ab-e Garm-e Khamir, 60 m, Mozaffarian 45283; E. of Bandar-e Pol, margin of Pol river, 20 m, Mozaffarian 45146; 20 km E. of Bandar Khamir on road from Bandar Abbas to Bandar Lengeh, sea level, Akhiani, Khatamsaz & Zaifi 68033. -Baluchestan: 5 km on road from Rask to Chahbahar, 400 m, Runemark, Assadi & Sardabi 22536; 135 km, on road from Rask to Chahbahar, 200 m, Runemark, Assadi & Sardabi 22477.

Zygophyllum miniatum Cham & Schlechtend var. ***miniatum***

This variety differs from var. *englerianum* M. Pop. by having smaller fruits and leaves. Also number of leaflets in var. *miniatum* is between 1-3 pairs. Its distribution extends from central Asia to Afghanistan and C. of Iran.

Iran: Semnan, 20 km SE. on road to Biarjomand, 1490 m, Freitag & Mozaffarian 28313; Sorkheh Dahaghin, 1250 m, Mozaffarian 58854; Towran protected area, desert mountain, about 50 km. SE. of Toroud, 800-850 m, Freitag & Mozaffarian 28667.

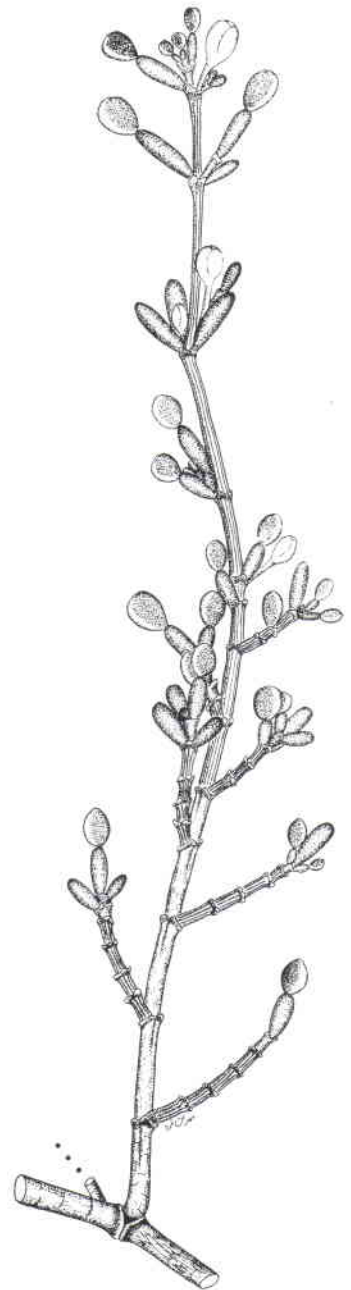


Fig.1. *Zygophyllum qatarense* (x 1.8).

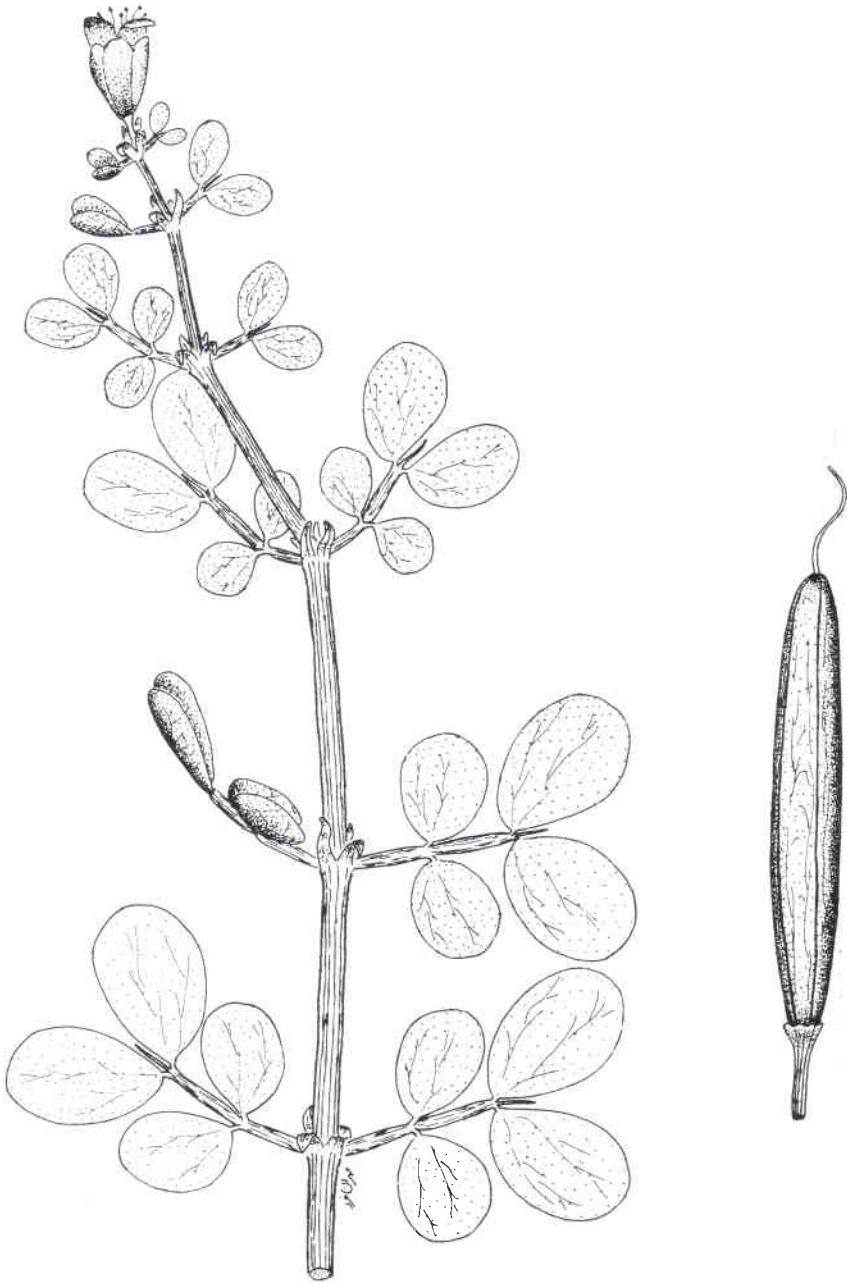


Fig.2. *Zygophyllum miniatum* var. *miniatum* (x 2; fruit x 4).

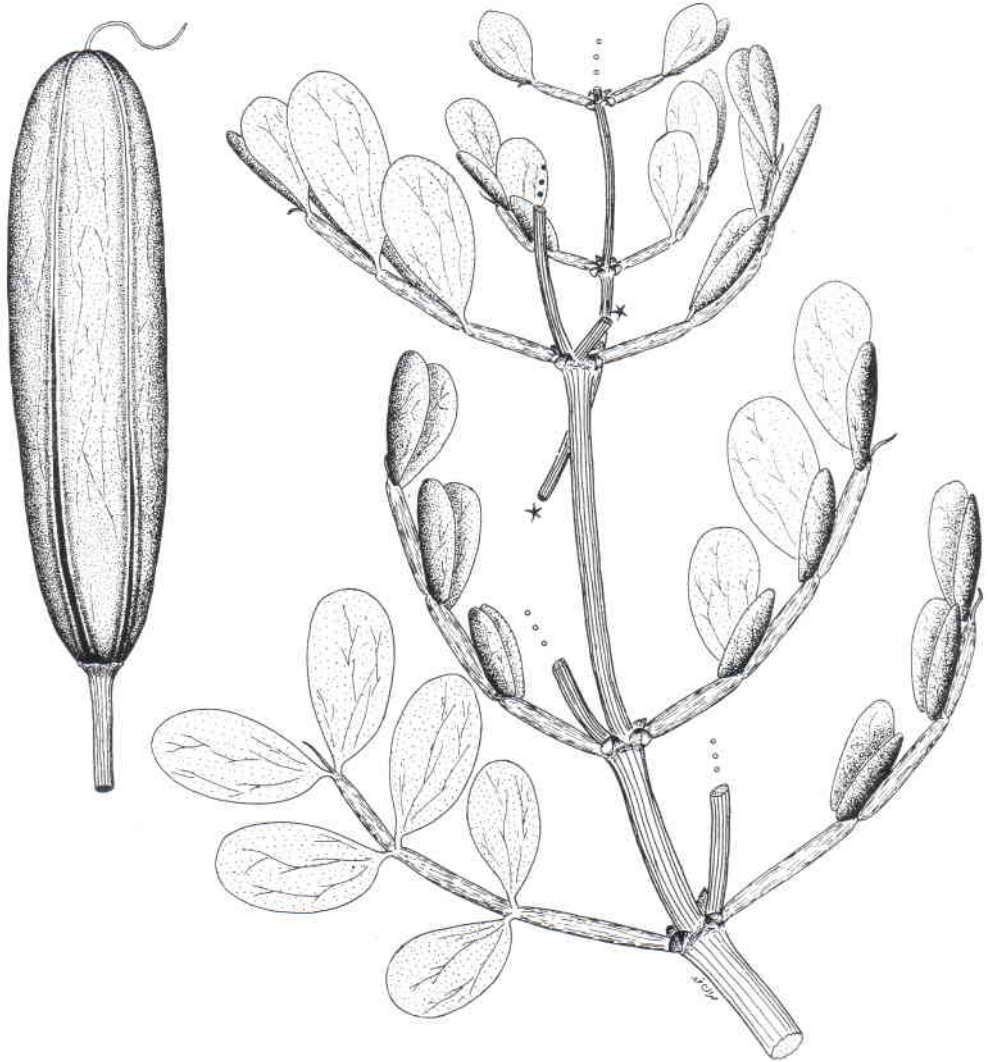


Fig.3. *Zygophyllum miniatum* var. *englerianum* (x 1.6; fruit x 3.3).

Acknowledgments

Thanks due to Mr. Mehranfard the artist of the

Research Institute of Forests and Rangelands
for drawing of illustrations.