

# MONERMA P. BEAUV. (GRAMINEAE) A NEW MONOTYPIC GENUS RECORD FOR THE FLORA OF IRAN

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Received 02.10.2010. Accepted for publication 02.03. 2011.

Naqinezhad A., Ghahremani-Nejad, F. & Bahari, H.: *Monerma* Beauv. (*Gramineae*) a new monotypic genus record for the flora of Iran. -*Iran. J. Bot.* 17 (1): 75-77. Tehran.

*Monerma* Beauv. (*Gramineae*) is recorded for the first time as a new monotypic genus for the flora of Iran. It includes only one species, *M. cylindrica*, which was collected from Semeskandeh Protected Area (Sari, Mazandaran) on the lowland area.

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گزارش جدید جنس تک گونه ای *Monerma* برای فلور ایران

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جنس *Monerma* (*Gramineae*) به عنوان جنسی منوتیپیک (تک گونه ای) برای اولین بار برای فلور ایران گزارش می گردد. *Monerma cylindrica* تنها گونه آن می باشد که از منطقه حفاظت شده سمسکنده (ساری) استان مازندران) با ارتفاع بسیار کم جمع آوری شده است.

## Introduction

Semeskandeh protected area, Sari (Mazandaran prov.), is one of the remnant lowland forests of Hyrcanian district, N Iran. This forest is protected by the Department of Environment and mainly dominated by *Quercus castaneifolia* and *Parrotia persica* trees. During a floristic and vegetation study on this area, a new genus of grass family (*Monerma* P. Beauv.) was collected from the forest-edge areas. After detail assessment on the collected specimens using many Flora books, it was determined as *M. cylindrica* which has not been reported in Flora Iranica area (Bor, 1970).

## Material and Methods

The collected specimens were determined by Grasses of the Soviet Union (Tsvelev, 1976), Flora of Turkey (Tan, 1985), Flora Iranica (Bor, 1970) and Flora of Iraq (Bor, 1968). The characteristics of spikelet, glume, lemma, palea in the specimens were studied carefully by striomicroscope (Nikon: SMZ-1). The specimens recorded were deposited in Mazandaran University Herbarium. A duplicate of the specimen was also

submitted to the herbarium of Research Institute of Forests and Rangelands (TARI) as gift.

## Results and discussion

*Monerma cylindrica* (Willd.) Cosson & Durieu., Expl. Sci. Alg. Glum.: 214 (1855). (Fig. 1)

Syn.: *Hainardia cylindrica* (Willd.) Greuter in Boissiera 13: 177 (1967); *Rottboellia cylindrica* Willd., Sp. Pl. 1: 464 (1797); *Lepturus cylindricus* (Willd.) Trin., Fund. Agrost. 123 (1820).

*Examined specimen.* Mazandaran: Sari, Semeskandeh protected area, 159 m a.s.l., 27.06.2010, H. Bahari 1010- Herbarium of Mazandaran University, duplicate in TARI.

*Description.* Annual plant, stems erect or curved-ascending, 10-25 cm tall, smooth, glabrous, green or ± glaucous. Leaves linear-lanceolate, glabrous, margins scabridulous towards the apex; sheaths glabrous, that enclosing spike retrorsely scabridulous. Ligule c. 0.5 mm, truncate-denticulate. Spikes 5 to 15 cm long, with up to 30 spikelets, glabrous. Terminal spikelet with two glumes and lateral spikelet with one glume. Glume without keel, lanceolate, thick, cartilaginous-



Fig. 1. *Monerma cylindrica*.

coriaceous, glabrous, acuminate, five veined. Lemma slightly shorter than spiklet, membranous, minutely pubescent in apical half, with three inconspicuous veins, acuminate. Palea shorter than lemma with two prominent veins. Lodicules 2, glabrous. Anthers ca. 3 mm long.

*General distribution.* *Monerma cylindrica* distributes all over western (coastal) and S Europe (Mediterranean), Cyprus, NW & W Turkey, Lebanon, Palestine, W Syria, Iran, Iraq, Crimea, Eastern

Transcaucasus, N Africa (Algeria), Macaronesia and introduced in Australia, S Africa, N & Temperate S America (Bor, 1968, 1970; Tsvelev, 1976).

The closest locality to the new collection of the species in Iran is eastern Transcaucasus and Kurdistan (Iraq). The location mentioned by Bor (1968, 1970) in Flora of Iraq and Flora Iranica is only in Iraq. The author of Flora of Iraq (Bor, l.c.) considered Iran as one of distributional range of this species but the same author rejected the occurrence of this species in Iran (see Bor, 1970, page. 245). Therefore the considering

of occurrence of this species in Iran by some authors (Tsvelev 1976, Bor, 1968) is possibly because of the occurrence of *Monerma* in the border area of Iraq and Iran.

*Monerma cylindrica* grows in the edge of forest area of Semeskandeh protected area.

### **Acknowledgements**

We thank Mr Esmaili (Department of Environment, Sari) for his collaboration in the field studies.

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