

BOUTELOUA CURTIPENDULA IN HERBARIUM UNIVERSITY OF CRAIOVA, ROMANIA

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Abstract. The paper presented in full material with the interesting presence of the *Bouteloua curtispindula* in Herbarium University of Craiova. This species has been collected by Marin Păun in June, 26th, 1962, but the species has not been identified. The species presence as new for Romania, has been presentation in summary in the 7th International Symposium „Prospects for the 3rd Millennium Agriculture” October 2-4, 2008, USAMV Cluj-Napoca [5].

Keywords: flora, *Bouteloua curtispindula* (Michx.) Torr., Oltenia, Romanian

INTRODUCTION

Bouteloua curtispindula (Michx.) Torr. is a well-known species on the American continent, being treated in over 810 works (google.ro), whereas on the European continent it was found only in Czech Republic, being quoted in Index Seminum 2005, as a species cultivated in The Botanical Garden, Palacký University in Olomouc [10], as well as in The Royal Botanical Gardens, Kew [2, 17].

Following the material herborized (Fig. 1) by M. Păun (Ph.D. Professor of the Agronomic Instituted “T. Vladimirescu”, University of Craiova), in the Herbarium of the University of Craiova (CRA), we had the surprise to find out a species which has not been identified so far in Romania. This species has been collected by Marin Păun in June, 26th, 1962, in a region between Greci and Vladuleni (Osica de Sus) localities, Olt county, Oltenia Region, Romania, alt. 55 m (Herbarium University of Craiova - CRA).

MATERIALS AND METHODS

The determinations were established according with the specialty literature found in the bibliography [1-4, 6-17]. With Ph.D. Professor Vasile Ciocărlan`s help (University of Bucharest), this species has been identified *Bouteloua curtispindula* (Michx.) Torr.

RESULTS

Bouteloua curtispindula (Michx.) Torr (Syn.: *Bouteloua racemosa* Lag.) [2, 4, 7, 8, 12]

Perennial, with rhizomes.

Culms, generally erect, solid, 2-3 mm diameter, 54 cm height, glabrous, purplish at the nodes.

Leaves evenly distributed; sheaths glabrous, with papilla`s hairs in the long veins; blades < 25 cm long, < 4 mm wide, scabrous abaxially and adaxial. Ligules 0.3-0.5 mm long, membranous, ciliate.

Inflorescences (Fig. 2): composed of racemes, 13-30 cm, secund, with (12) 30-80 reflexed branches; branches (5)10-30(40) mm, deciduous, with (1)2-7(15) spikelets, axes terminating 3-5 mm beyond the base of

the terminal spikelets, apices entire; angled to 1 side of slightly zigzag rachis, flag-like.

Spikelets pendent, with 1 bisexual and 1-2 sterile, rudimentary florets. Glumes (Fig. 3) unequal, glabrous or scabrous; lower glumes 2.5-6 mm, 1/2 or more as long as the upper glumes; upper glumes 5.5-8 mm; lowest lemmas 3-6.5 mm, glabrous or scabrous-strigose, often minutely rugose, acute or inconspicuously 3-lobed, 3-veined, veins usually extending as short mucros or awns to 6 mm; central mucros or awns not flanked by membranous lobes; lowest paleas acute, unawned; anthers 1.5-3.5 mm, anthers yellow, orange, red, or purple; distal floret(s) 0.4-3.5 mm, sterile, variable, usually a glabrous lemma having a short membranous base, no palea, and 3 unequally-developed awns, central awns 1.5-7 mm.

Chromosomes: $2n = (20), 40, 41-103$.

Ecology: unknown yet

Flowering time: May-Aug

Distribution: Asia-temperate: China. North America: western Canada, eastern Canada, northwest USA, north-central USA, northeast USA, southwest USA, south-central USA, southeast USA, and Mexico. South America: Mesoamericana, western South America, and southern South America.

New chorology:

Locality: Osica de Sus (Fig. 4)

Villages: Greci, Osica de Sus, Ostrov, Peretu, Tomeni, Vladuleni

Population (2007): 5.278

Region: Europe by East

Country: Romania

Historical Region: Oltenia

District: Olt

Coordinates: 44°15'0"N, 24°19'0"E

General considerations regarding the station conditions: The locality is situated in The Oltenia Plain and it is characterized by temperate-continental climate which reach an annual average of 10-11°C; here there are felt some sub-Mediterranean influences. The multiannual precipitations average of 55 l/m² is lower than the average value at the national level. Being situated in The Olt River Meadow, the main soil types are: fenny, alluvial levigate chernozem, alkaline vertisols.

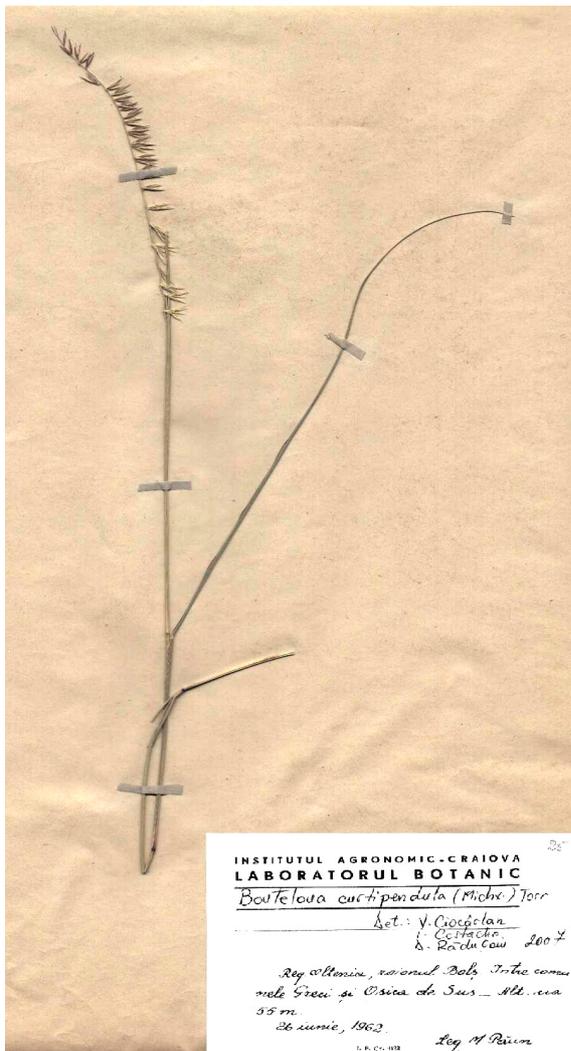


Figure 1. The material herborized (original scanned)



Figure 2. Detail inflorescences (original scanned)



Figure 3. Detail spikelet (original scanned)

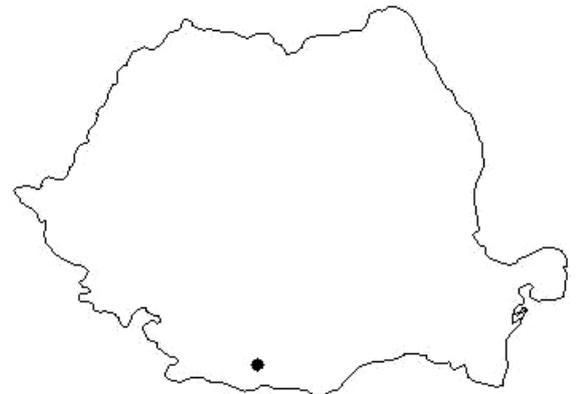


Figure 4. The chorology of the of the *Bouteloua curtipendula* in Romania Country

DISCUSSIONS

We do not know the ways this species appeared in this area and, moreover, nobody has collected it since 1962 to the present. It may have been accidentally introduced in our country, together with the import of

caryopses of cultivated gramineous species (*Triticum sp.*, etc.). It is possible that the species existed after 1962 but nobody identified it and, thus, it was the subject of no research. The species is also interesting due to the fact that it is included in the list of invasive and exotic species on the American continent [11].

Bouteloua curtipendula (Michx.) Torr is an adventive species with invasive potential found in Romania after 1962, which has been unidentified and unnoticed so far. Depending on the further research results which are to be done during the summer of 2008, the situation of the respective species could be clarified.

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