

***ERIOCHLOA VILLOSA* (THUNB.) KUNTH (*POACEAE*) IN THE ROMANIAN FLORA**

V. CIOCÂRLAN*, MARIA SIKE**

Summary: The presence of a new plant species is signaled out here, for the 1st time in Romania, by the authors of this paper. This plant - *Eriochloa villosa* (Thunb.) Kunth - is an invader one in the flora of Romania. It has been discovered inside the crops of flax, clover, sun flower, maize, at Livada, Satu Mare county. This species is a characteristic one for the rice crops, but it is growing also inside the wet meadows, along the river's meadows.

Key words: *Eriochloa villosa*, Romania

Sistematical framing of the species:

Tribe Paniceae R. Br. 1814, in Flinders, Voy, Terra Austral. 2: 582, s. str.

Eriochloa* Kunth, 1816, in *Humb. et Bonpl. Nov. Gen. et Sp. 1: 94

X = 9

E. villosa (Thunb.) Kunth, 1829, Révis. Gram. 1:30 (*Paspalum villosum* *Eriochloa villosa* (Thunb.) Kunth Thunb.)

This species has been discovered in some crops of clover, sun flower, maize, at Livada, Satu Mare county. It is also growing in the wet meadows. This is a newly discovered genus in the flora of Romania.

Botanic description of the species: it is an annual herb, invaders, of 50-100 cm high, with stems, sheaths, and the lamina of the leaves being covered by very short hairs. Ligule (Fig. no 1A) is represented by a line of hairs. The inflorescence is made by a central axle, of 4-12 cm, on which there are 3-12 racems of 2-4 cm longer, and ane-sided oriented. The spikelets are biflorate, the inferior flower being sterile. The spikelets are between 4,5-5 (-6) mm longer, being antero-posterior compressed, unaristated, downy, having a characteristic swelling (a bearer) (Fig. no 1B). The glumes are undeveloped and adhesive to the peduncle of the spikelets; the peduncle have long and dense hairs. The spikelets are to be falled down (disintegrated) under the swelling (the bearer). Caryopsis is compressed, whitish, and with longitudinal punctiform striae (Fig. no 1C). VII – VIII. $2n = 54 (2)$.

The occurrence and ecology: it is a meso-hygrophilous towards hygrophilous plant species, being spread mostly in crops of rice. In Romania, in Câmpia Livadei, it is spread in various crops, on podsols, well supplied by water, but also in wet meadows. It is originated from Eastern Asia, from where it was spreaded, into the rice crops, reaching to the South-East part of Russia, and into the Southern part of Ukraine (1), from where, most probable, attained our contry. In some places, this plant species, are growing also along the meadows of the rivers. But, in Russia and R. Moldova, there is growing an other species of

* Universitatea de Științe Agronomice și Medicină Veterinară București

** Stațiunea de Cercetări Agricole Livada, jud. Satu Mare

Eriochloa, namely *E. succinta* (Trin.) Kunth, but along the meadows of the rivers. It is most probably to be discovered, also, in the flora of Romania.

A remark: the stem (the straw) at the *Poaceae* Family is, generally, unbranched; there is, however, some exceptions, which are specified into the botanical references, at: *Leersia*, and *Crypsis*. Beside these exceptions, we also found out, other genera in *Paniceae*, which have stems branched, mostly segetal weeds, for instance: *Echinochloa crus-galli*, *Setaria pumila*, *S. faberi*, *Digitaria sanguinalis*, and for now, *Eriochloa villosa*. At this last species, at the basis of internodes 2 – 4 (from the base upward), from the interposed meristems are made some secondary and tertiary branches, bearing terminal inflorescences. In this way, the number of the fruits is considerably larger, thus phasing the ripening, assuring the spreading and living of this plant species. We cannot say if this branching process is an effect of fertilising and irrigating of the soil, or/and of herbicides, or it is only an adaptation in the struggle of existence of the plant species. It is necessary a comparatively analyze of this plant species growing in the crops versus those growing in the natural meadows.

References

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Fig. 1A



Fig. 1B



Fig. 1C