

***Eclipta prostrata* (Asteraceae): a new alien species for the Bulgarian flora**

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Abstract. *Eclipta prostrata*, a weed distributed in the rice-fields of some Mediterranean countries in Europe, is recorded from the Aleko islands group (Rouse district) for the first time in Bulgaria.

Key words: Aleko islands group, alien species, *Eclipta prostrata*, Northeast Bulgaria

During fieldwork on the Aleko islands group, Zdravkov island, in 2006, the author found a new species for the flora of Bulgaria, from the family *Asteraceae*, tribe *Heliantheae*.

***Eclipta prostrata* (L.) L., Mantissa Alt. 286 (1771) (Fig. 1)**

Annual, multibranched, strigose, erect or prostrate plant, 20–90 cm tall. Leaves opposite, acute at base, 4–13 × 0.8–2 cm, pilose, oblong to lanceolate, remotely serrate, acute-acuminate, the lower sessile or petiolate. Capitulae terminal and axillary, several to many, hemispherical, up to 1 cm wide, heterogamous. Peduncule up to 7 cm long. Involucral bracts herbaceous, ovate, acute, appressed-pubescent, 6 mm long. Receptacular scales setaceous, ciliate at apex; disc-florets perfect; ray-florets pistillate, with 4–5-fid corolla; ligules c. 6 mm, white, entire or bifid. Anthers apically blunt, basally slightly sagittate. Achenes of ray-florets triangular, of disc-florets four-angular, all tuberculate, black, glabrous, except for a few apical hairs, depressed-truncate at apex, with 1–3 minute marginal teeth, about 3 mm long, marginally ribbed.

The blossoming and fruiting period in Bulgaria is probably from July to October and depends on the water level of the Danube River.

Eclipta prostrata was found in Northeast Bulgaria, the Danube River: on the Zdravkov island (Aleko islands group), west of Ryahovo village, Slivo Pole Municipality, Rouse district, MJ-37, 43°55′54.84″N, 26°11′09.52″E, 26.10.2006, with flowers and achenes, coll. R. Tzonev (SOM 163310).

Vegetation in the locality belongs to the class *Isoetoneanojuncetea* Br.-Bl. & Tuxen 1943. The riverbank of the Danube is a wet and muddy here, with communities of small annual hygrophytes: *Dichostylis michelianus* (L.) Nees., *Chenopodium botrys* L., *Ch. ambrosioides* L., *Cyperus fuscus* L., *Crypsis alopecuroides* (Pill. & Mitt.) Schrader, *Filaginella uliginosa* (L.) Opiz., *Bidens tripartita* L., and *B. frondosa* L. Several plants were found in an old dry natural river branch (“zaton”) on the biggest island – Aleko. Another newly found (Tzonev & al. 2003) alien species for the flora of Bulgaria – *Cyperus strigosus* L. – was identified in the same locality.

Eclipta prostrata is widely distributed across the world. It is known from the North and South America and the tropics of the Old World (comprising the islands of Oceania and Australia) (Wagner & al. 1999), and from Tropical America (Smith 1991). It is determined as a “pantropical weed of open, sunny, wet localities” (Stone 1970). According to Tutin (1976), the species occurs in the following European countries: Italy, Spain, and Portugal. The author assumes that its origin can be traced back to the tropical and warm-temperate America. However, Stone (1970) maintained a different opinion. He suggested a probable Asiatic origin. According to Tutin (1976), in the European countries the species grows in the rice- fields and other wet places.

Eclipta prostrata is a new and unknown plant for the Bulgarian flora. It has probably penetrated with the water birds. It is not certain yet if it will turn out an aggressive weed (more probably not), but its

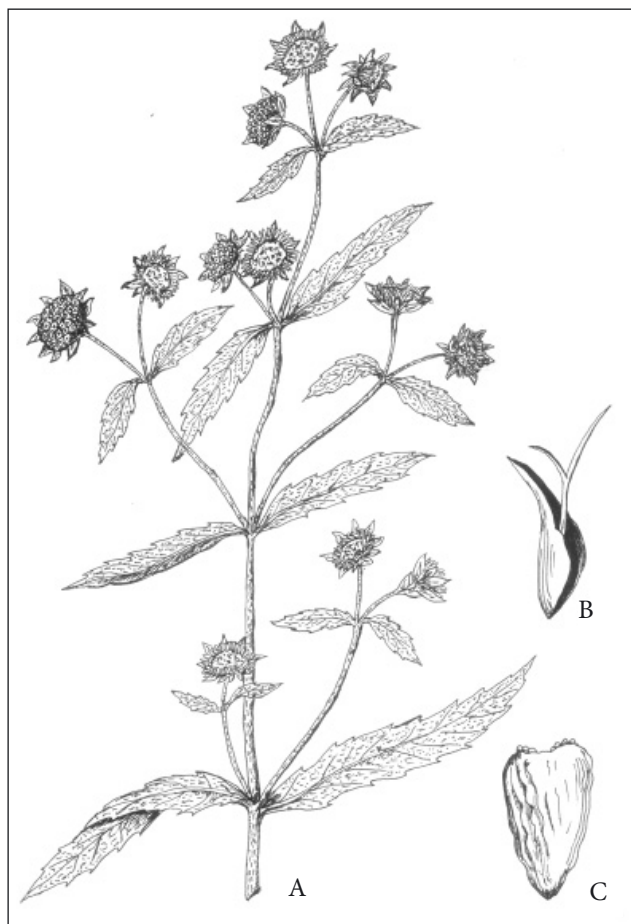


Fig. 1. *Eclipta prostrata*: A – stem with leaves and capitulae; B – flower; C – achene.

distribution will increase along the Danube and its tributaries. There is a potential for medicinal use of this plant. It is known as a medicinal and edible plant: antiseptic, stringent, depurative, emetic, febrifuge, ophthalmic, purgative, styptic, and tonic (Yeung 1985). It is used internally for the treatment of anaemia, diphtheria, etc. (Bown 1995), tinnitus, tooth loss, and premature greying of the hair (Yeung 1985). Externally, it is used as oil against hair loss and is also applied to cure athlete's foot, eczema, dermatitis, wounds, etc. The plant is harvested as it comes into flower and is dried for later use (Bown 1995). The roots are emetic and purgative and they are applied externally as an antiseptic for ulcers and wounds, especially in cattle (Chopra & al. 1986). The leaves of the plants could be cooked and used as a vegetable (Kunkel 1984).

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