

Oenothera oehlkersii Kappus ex Rostański – a new evening-primrose species in Polish flora

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Abstract: *Oenothera oehlkersii* Kappus ex Rostański – a new species of Polish flora – was found on the Przemyśl Foothills. The species is a hybrid between *Oe. glazioviana* Micheli in Mart. and *Oe. suaveolens* Desf. ex Pers. In this paper, authors present some features useful in recognizing the parental species and the hybrid one.

Key words: Polish flora, Onagraceae, Przemyśl Foothills, *Oenothera oehlkersii*

During the field studies carried out on the Przemyśl Foothills at the beginning of August, 2010, a new *Oenothera* species of the Polish flora – *Oenothera oehlkersii* Kappus ex Rostański – was discovered. It was found in Kupiatycze (about 9 km south from Przemyśl, Fredropol community, ATPOL square 2 x 2 km – GF9041), (Fig. 1). The population consisted of only 3 specimens (2 of them were found on a roadside and

1 in a ditch) growing in a community of meadow and pasture vegetation.

The species is a presumed hybrid which originated in Europe by the crossing between *Oe. glazioviana* Micheli in Mart. and *Oe. suaveolens* Desf. ex Pers. (Rostański *et al.* 2010). It is classified to Series *Oenothera* Rostański, which contains glandular-pubescent species, mostly with broad-leaves and big flowers

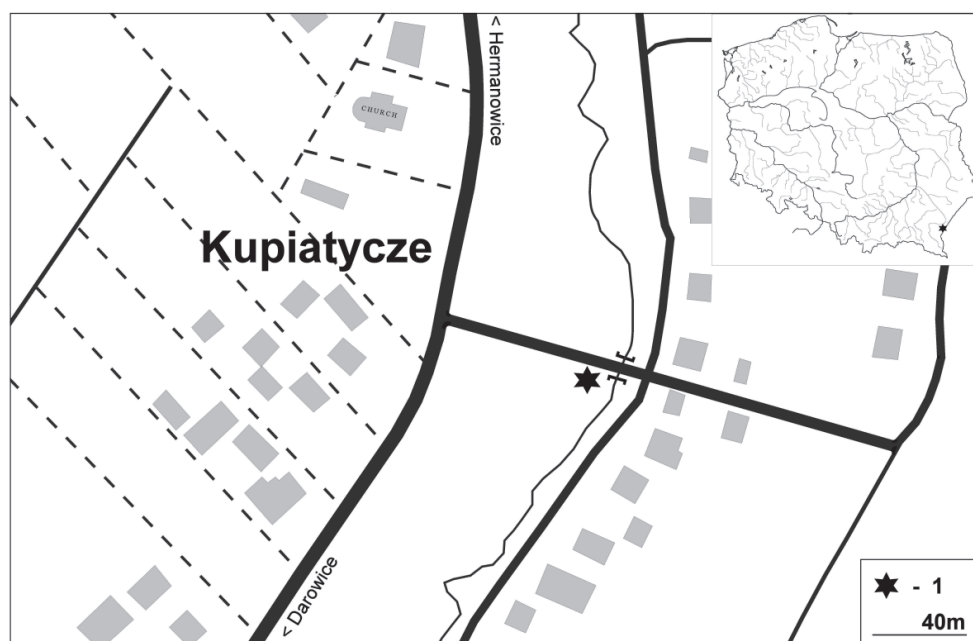


Fig. 1. The first locality of *Oenothera oehlkersii* Kappus ex Rostański in Poland

Table 1. The comparison of selected features of *Oenothera oehlkersii*, *Oenothera glazioviana* and *Oenothera suaveolens*

Feature	<i>O. suaveolens</i>	<i>O. oehlkersii</i>	<i>O. glazioviana</i>
colour of a stem	green	green	green or reddish
colour of a rachis	green	green	red
colour of papillae	green	green	red
colour of midribs	white	white	red or white
colour of flower buds	green to yellowish	green	red-striped
the shape of sepal tips at the base	appressed	appressed	appressed
petals [mm] (height x width)	25-35 x 25-35	30-45 (48) x (32) 35-48	30-50 x 32-58

(Rostański 1985). Full morphological descriptions are available in literature (Rostański *et al.* 2010); this paper presents only selected features which allow to distinguish the parental species and the hybrid one (Table 1).

Oenothera oehlkersii was described from Rhineland, Germany (Kappus 1957) and it is usually found in the contact areas of both parental species, but it can also form its own ranges (Rostański 1995). It was known so far from Western Europe, up to Portugal (Rostański 2006; Rostański *et al.* 2010). The closest known localities are in the territory of Slovakia, where it is cultivated in gardens because of its magnificent flowers and rarely escapes from a culture (Rostański 1995). Thus, the presented locality extends its range in Europe to the East.

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**Fig. 2.** Herbarium specimen of *Oenothera oehlkersii* Kappus ex Rostański from a new locality in Kupałycze (SE Poland)

References

- KAPPUS A. 1957. Wilde Oenotheren in Südwestdeutschland. Ztschr. Induk. Abstammungs u. Vererbungslehre 88: 38-55.
- ROSTAŃSKI K. 1985. Zur Gliederung der Subsektion *Oenothera* (Sektion *Oenothera*, *Oenothera* L., *Onagraceae*). Feddes Repertor. 96(1-2): 3-14.
- ROSTAŃSKI K. 1995. The occurrence of the *Oenothera* species in the Polish and Czech Sudetes and in the Polish and Slovak Carpathians. Thaiszia – J. Bot., Košice 5: 21-25.
- ROSTAŃSKI K. 2006. The occurring of *Oenothera* species in Scandinavia. Biodiv. Res. Conserv. 1-2: 64-68.
- ROSTAŃSKI K., ROSTAŃSKI A., GEROLD-ŚMIETAŃSKA I. & WĄSOWICZ P. 2010. Evening-Primroses (*Oenothera*) occurring in Europe. 157 pp. W. Szafer Institute of Botany, Polish Academy of Sciences, Kraków.