

*RUBUS MAXIMUS* (ROSACEAE) FOUND ALSO IN POLAND

PIOTR KOSIŃSKI, JERZY ZIELIŃSKI

P. Kosiński, Department of Botany, Poznań University of Life Sciences,
Wojska Polskiego 71 C, 60-625 Poznań, Poland, e-mail: kosinski@up.poznan.pl
J. Zieliński, Institute of Dendrology, Polish Academy of Sciences,
Parkowa 5, 62-035 Kórnik, Poland

(Received: April 3, 2013. Accepted: May 29, 2013)

ABSTRACT. *Rubus maximus* Marsson, regional bramble species occurring mainly in the Baltic coastal area of the NE Germany, was reported from Świnoujście in XIX century. Its occurrence in Poland was confirmed by the new locality only recently found in the Wolin Island.

KEY WORDS: Poland, woody plants, *Rubus*, bramble, new species, chorology, geographical distribution

INTRODUCTION

Rubus flora of the Polish Western Pomerania is relatively poor as compared to the areas located more to the south and west. In Europe the main centre of brambles distribution is in the west of the continent and species and their number diminishes naturally towards the east. From the studies conducted by HENKER and KIESEWETTER (2009) in Mecklenburg-Vorpommern (Mecklenburg-Western Pomerania), it appears that several species not listed in Poland until now (including *R. maximus*) have their westernmost localities just near the German-Polish border. One can thus suppose that some of them may occur also on the Polish territory. This fact gave an idea to undertake field studies on the Polish side of the border, with special attention paid to species that could potentially occur in the western outskirts of Polish part of Western Pomerania.

GENERAL DISTRIBUTION

Rubus maximus is regional species from the section *Corylifolii*, subsection *Subidaeus*, distributed in the western part of the southern Baltic coastal area, encompassing inlands of the Usedom, Rügen and Hiddensee (HENKER and KIESEWETTER 2009; Fig. 1 A). The main centre of its distribution is the Usedom Island (mainly NW part), where is situated its *locus classicus*: Glinnerholz by Zinnowitz (MARSSON 1869).

DISTRIBUTION IN POLAND

Rubus maximus was mentioned by MARSSON (1869) from Świnoujście spa park ("Park Zdrojowy", "Plantage bei Swinemünde"), but this stand was not confirmed in

later years and was not included in the latest floristic works encompassing Polish territory (ZIELIŃSKI 2004, KURTO et AL. 2010; Fig. 1 B). During the field studies the species was found in only one stand in the Wolin Island (Przytór peninsula): Zachodniopomorskie Province, Świnoujście city, housing estate Przytór-Łunowo, Wolińska street, ATPOL: AB2284, geographical coordinates: 53°53'47.63"N, 14°20'32.36"E (Kosiński, KOR49944; Fig. 1 B). It grew there quite numerously (about 30 specimens) in the margin of fresh mixed coniferous forest and partly in wayside thickets.

DESCRIPTION OF THE SPECIES BASED ON COLLECTED MATERIAL (FIG. 2-7)

Rubus maximus T. Marsson, Fl. Neu-Vorpommern: 151. 1869

[Synonyms: *Rubus corylifolius* subsp. *maximus* (Marsson) Frid., in Bot. Centralbl. 70: 350. 1897, *Rubus pruinus* subsp. *maximus* (Marsson) Focke, in Ascherson & Graebner, Syn. Mitteleur. Fl. 6(1): 629. 1903]

Stems erect or suberect, 1-1.5 m tall, terete, glabrous, greenish and slightly glaucous, sometimes somewhat purplish on the side exposed to the sun. Prickles conspicuously dark purple, uniform, up to (3) 5-13 per 5 cm, thin, 2-4 mm long, straight or a little inclined or curved, with 1.5 mm wide base. Leaves 3-(4-5)-foliolate, conspicuously large (name!), up to 35.5 cm long (38 cm: HENKER and KIESEWETTER 2009), above dull green with 30-60 adpressed, simple hairs per 1 cm² and with scattered simple hairs beneath. Leaflets usually imbricate (sometimes contiguous). Terminal ones on relatively short or more rarely mid-long petiolules (24-33%), usually broadly ovate, sometimes suborbicular, distinctly cordate or rarely subcordate to rounded at the base, with

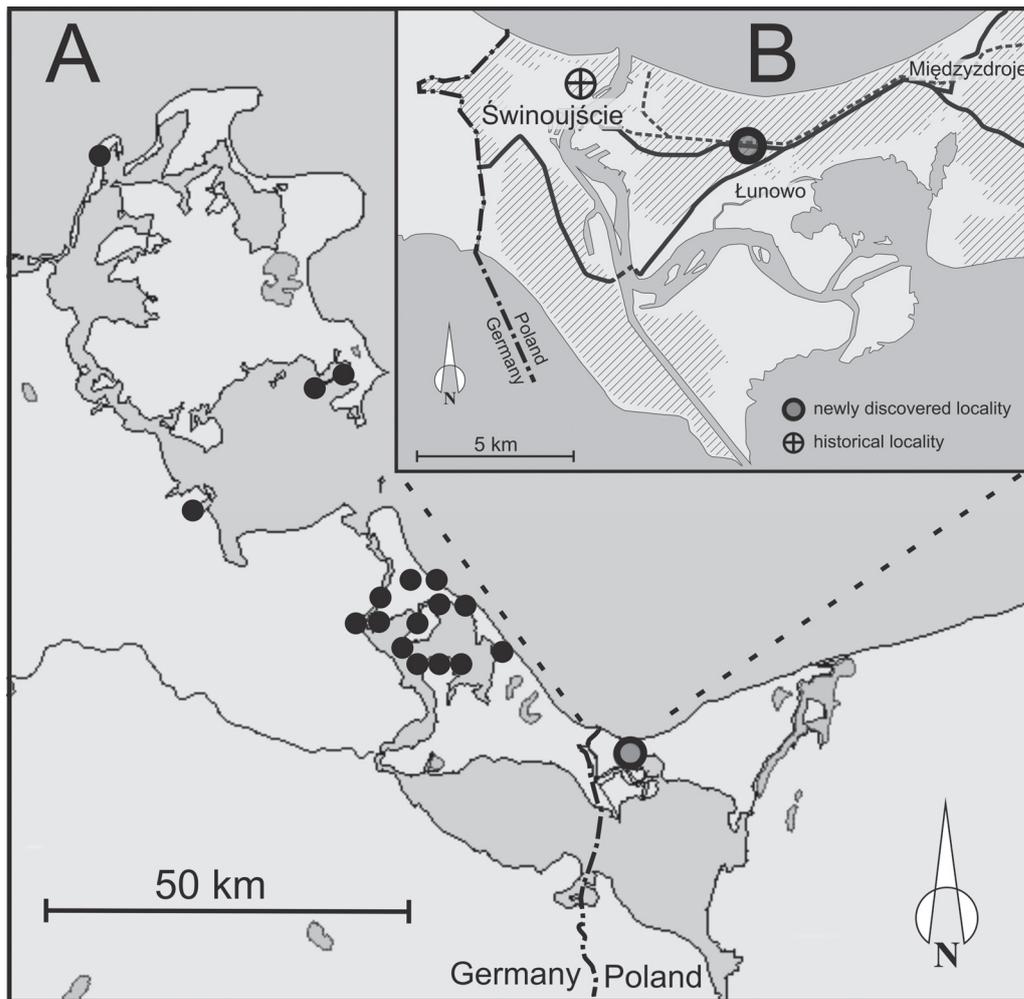


FIG. 1. A – general distribution of *Rubus maximus*, according to HENKER and KIESEWETTER (2009), B – occurrence in Poland

acuminate apex 1-2 cm long; margins coarsely, periodically serrate (incisions up to 3-5 mm deep), with somewhat prominent, straight principal teeth. Basal leaflets sessile or subsessile (up to 1-1.5 mm long petiolules), in 3-foliolate leaves more or less bilobate. Petioles shorter than basal leaflets of 3-foliolate leaves (usually 70-75% of their length; but somewhat longer than basal leaflets of 4-5-foliolate leaves), with scattered hairs above and almost glabrous beneath, with 4-8 fine, 1-2.5 mm long, straight or a slightly curved/inclined prickles. Stipules linear-lanceolate, eglandular, with loose, protruding hairs. Inflorescence: short, few flowered raceme (usually with 5-8 flowers), significantly dominated by the leaves. Lower leaves 3-foliolate (the highest often simple ones), with margins more coarsely and irregularly serrate (incisions up to 5-8 mm deep) than those of the turion. Inflorescence axis loosely hairy with patent simple hairs, glandless; prickles only slightly inclined/curved, usually 1-2 mm long. Pedicels 1-2.5 cm long, with patent hairs and 1-3 slightly curved/inclined prickles 1-1.5 mm long, glandless. Sepals green on the back (grey bordered and sparsely hairy), unarmed, with filiform extended tips,

patent or reflexed after anthesis. Petals white, rarely pinkish, elliptical or obovate, quite large, 10-14 mm long. Ovaries distinctly hairy above. Stamens with glabrous anthers more or less as long as greenish styles. Receptacle and ovary glabrous or with sparse long hair. Drupelets blackish red when ripe, mostly failed or not fully developed. Flowering VII-VIII.

MAIN DIAGNOSTIC FEATURES

From the other Polish representatives of the section *Corylifolii* the species can be separated by the following combination of characters: stems terete, glabrous with small, purple prickles, very large leaves, inflorescence axis sparsely hairy (without stellate hairs), eglandular, sepals green on the back.

Acknowledgements

We would like to express our gratitude to Dr. Heinz Henker who kindly confirmed our determination of the species.

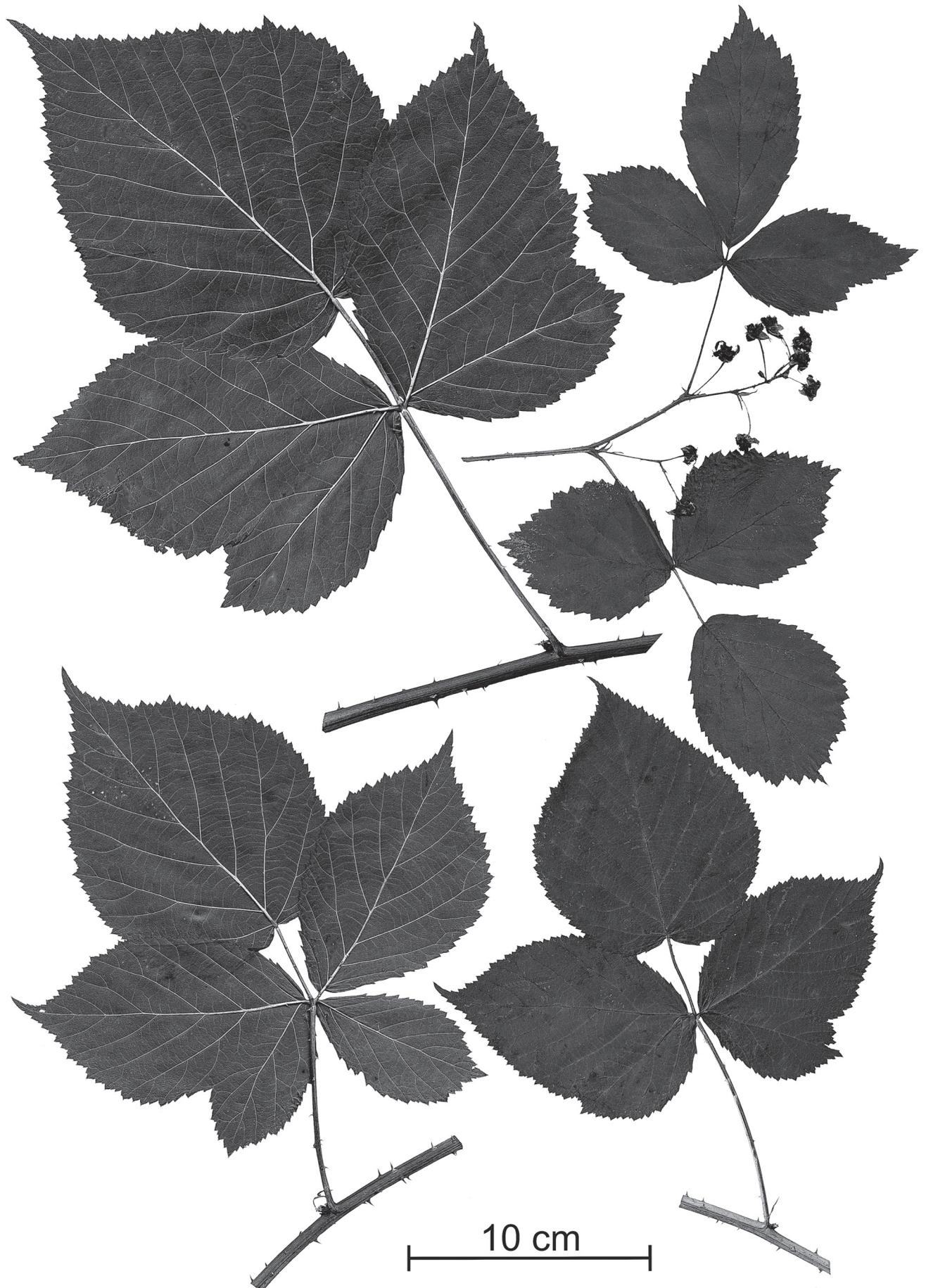


FIG. 2. *Rubus maximus*: parts of sterile stem (with upper and under sides of leaves) and inflorescence (Kosiński, KOR49944)



FIG. 3. Flower of *Rubus maximus* (Phot. P. Kosiński)



FIG. 5. *Rubus maximus* – fragment of vegetative stem against a background of the upper side of the leaf (Phot. P. Kosiński)



FIG. 4. Aggregate fruit of *Rubus maximus* (Phot. P. Kosiński)



FIG. 6. First-year non-fruiting vegetative shoot (primocane) of *Rubus maximus* (Phot. P. Kosiński)



Fig. 7. *Rubus maximus* in wayside thickets (Phot. P. Kosiński)

REFERENCES

- HENKER H., KIESEWETTER H. (2009): *Rubus*-Flora von Mecklenburg-Vorpommern (Brombeeren, Kratzbeere, Himbeeren, Steinbeere). Botanischer Rundbrief für Mecklenburg-Vorpommern 44.
- KURTTO A., WEBER H.E., LAMPINEN R., SENNIKOV A.N., (eds.) (2010): Atlas Florae Europaeae. Distribution of Vascular Plants in Europe. 15. Rosaceae (*Rubus*). The Committee for Mapping the Flora of Europe & Societas Biologica Fennica Vanamo, Helsinki.
- MARSSON T.F. (1869): Flora von Neu-Vorpommern und den Inseln Rügen und Usedom. Engelmann, Leipzig.
- ZIELIŃSKI J. (2004): The Genus *Rubus* (Rosaceae) in Poland. Pol. Bot. Stud. 16.
- For citation: Kosiński P., Zieliński J. (2013): *Rubus maximus* (Rosaceae) found also in Poland. Roczn. AR Pozn. 392, Bot. Stec. 17: 33-37.