

Rubus kletensis, a new species from South Bohemia and Upper Austria

Rubus kletensis, nový druh ostružiníku z jižních Čech a Horního Rakouska

Martin Lepší¹ & Petr Lepší²

¹South Bohemian Museum, Dukelská 1, CZ-370 51 České Budějovice, Czech Republic, e-mail: lepsi@seznam.cz; ²Administration of the Protected Landscape Area Blanský les, Vyšný 59, CZ-381 01 Český Krumlov, Czech Republic, e-mail: plepsi@seznam.cz

Lepší M. & Lepší P. (2006): *Rubus kletensis*, a new species from South Bohemia and Upper Austria. – Preslia 78: 103–114.

A new species of bramble, *Rubus kletensis*, of the section *Corylifolii* Lindley, series *Sepincola* (Focke) E. H. L. Krause occurring in South Bohemia and Upper Austria is described. The distance between the most distant localities exceeds almost 150 km. This distinct and relatively easily recognizable species grows in rather moist, eutrophic, synanthropic and sunny biotopes, and occurs most frequently in the vegetation of the class *Galio-Urticetea*, less frequently in that of the alliances *Trifolion medii*, *Pruno-Rubion radulae*, *Sambuco-Salicion capreae*, *Berberidion* and exceptionally in forest plantations and growths of pioneer saplings. A distribution map for this species and a list of all known localities are included, as well as a drawing of the species.

Key words: Austria, batology, Czech Republic, ecology, phytosociology, Rosaceae, *Rubus*, sect. *Corylifolii*, taxonomy

Introduction

In the year 2000, an unknown species of bramble was found by the authors in the surroundings of the village of Krasetín (district of Český Krumlov, Czech Republic). In the same and the following years, a morphologically identical type was also observed at other localities. Based on a study of the literature (Weber 1973, 1981, 1995, 2000, Holub 1995) and a revision of the specimens by B. Trávníček and H. E. Weber it was obvious that the collected plants belong to an undescribed species.

Methods

The description of the species was based on 25 specimens (flowers and fruits were described from living material). Fifty measurements were made of each morphological character. Plants that were mown or abnormal for other reasons are not included in the description. Localities in the Czech Republic were sorted according to the regional-phytogeographical classification (Skalický 1988) and their locations taken from the electronic version of the Geobáze software (Anonymus 2000). Quadrant numbers of the localities refer to the grid system of Central European grid mapping (Ehrendorfer & Hamann 1965). To describe the phytosociology of the species, relevés with an additional bramble stratum E_R (sensu Holub & Kučera 2001) were recorded in selected vegetation types. For estimating of species abundance an extended Braun-Blanquet scale was used (2m = cover 5%, 2a = 5–12.5%, 2b = 12.5–25%; cf. Westhoff & van der Maarel 1973). Mosses were not recorded. The nomenclature of the taxa follows Kubát et al. (2002) and of syntaxa Moravec et al. (1995).

Rubus kletensis M. Lepší et P. Lepší, spec. nova (Fig. 1)

D e s c r i p t i o : Turio arcuato-ascendens usque arcuatus, angulatus, cum faciebus leviter convexis, viridis, saepe pruinosis, in partibus insolatis violaceus, pro 5 cm lateris 0–2 pilis simplicis atque (0–) 1–30 (–45) glandulis rubris sessilibus usque breviter stipitatis obsitus; aculei in numero (3–) 4–16 (–20) pro 5 cm longitudinis turionis, curvati usque uncinati, (1.2–) 1.5–3.0 (–3.5) mm longi, e basi dilatata breve subulati. Folia turionis digitato quinata, supra opace viridia, cum 0–30 (–42) pilis simplicis ad 1 cm², subtus pilis ad tactum perceptibilibus pilosa, ad nervos seriatim pilosa; foliola terminalia breviter petiolulata [longitudo petioluli (28–) 29–33 (–37)% longitudinis laminulae], ovata vel rotundata usque rotundate-obovata, basi cordata, in apicem 17–27 mm longa subabrupte vel abrupte attenuata, margine dentibus acutis grosse periodice serrata cum incissuris (0.35–) 0.40–0.60 (–0.70) cm profundis, raro usque sublobata; petiolus cum aculeis (11–) 16–23 (–30) curvatus usque uncinatis munitus; stipulae anguste lanceolatae usque filiformes 1–2 mm latae. Inflorescentia pyramidalis, pauciflora, usque ad apicem foliosa vel 3–5 cm infra apicem efoliosa; folia in parte superiori inflorescentiae ternata, in inferiore parte inflorescentiae quinata foliolis terminalibus anguste obovatis, supra cum (4–) 8–90 (–120) pilis simplicis ad 1 cm² (ad tactum parum perceptibilibus pilosa), ad nervos seriatim pilosa, margine dentibus acutis grosse periodice serrata; rhachis flexuosa, a pilis plerumque fasciculatis atque pilis longioribus et brevibus pubescens (insuper utque paulo tomentosa), cum glandulis rubris sessilibus usque breviter stipitatis intermixtis obsita, aculei rhachidis inflorescentiae subaequales (aculeis brevibus saepe intermixtis), in numero (5–) 8–20 (–24) ad 5 cm longitudinis, (0.5–) 0.7–2.1 (–2.5) mm longi, curvati (raro uncinati), basi dilatati atque rubescens. Pedicelli 9–21 mm longi, tomentosi pilisque patentibus longioribus [0.4–0.8 (–1.0) mm] instructi, cum glandulis rubris sessilibus usque breviter stipitatis intermixtis, cum (2–) 3–11 (–14) aculeis curvatis, raro usque uncinatis, (0.2–) 0.3–1.1 (–1.2) mm longis. Flores (21–) 23–30 (–33) mm in diametro; sepala intra viride-canescens, densiter tomentosa, extra canoviridia pilisque longioribus dispersis, extra intraque glandulis rubris sessilibus usque breviter stipitatis disperse obsita, albomarginata, margine saepe rosacea (praesertim ad basin atque intra margines posteriores), apicibus in appendices brevibus prolongata, appendices filiformes, raro usque foliiformes; petala rotundata, (8–) 9–12 mm longa, (8.0–) 8.5–12.0 mm lata, alba, glabra, breve unguiculata, sese tegentia; stamina stylis aequalia vel paulo breviora; antherae glabrae, viridulae; filamenta glabra, alba; ovaria glabra; styli albo-virescentes; receptaculum sparse pilosum, pilis ex ovariis exsertis. Fructus imperfecte evolutus, subglobosus, niger, dulcis, e (5–) 15–30 (–40) drupeolis compositus. Floret VI–VII.

Rubus subgen. *Rubus* sect. *Corylifolii* ser. *Sepincola* (Focke) E. H. L. Krause.

H o l o t y p u s : Bohemia meridionalis, České Budějovice, pagus Záboří (7051b); ad viam publicam ca. 0.9 km situ merid.-merid.-occid. a sacello, ad piscinam Robiček; 400 m s. m.; 48°58'57.9" N, 14°15'42.2" E; 8. 7. 2003 M. Lepší & P. Lepší; CB (M. Lepší et P. Lepší, No. 1001) (Fig. 2). – I s o t y p i: PR (M. Lepší et P. Lepší, No. 1002); OL (M. Lepší et P. Lepší, No. 1003); LI (M. Lepší et P. Lepší, No. 1004); W (M. Lepší et P. Lepší, No. 1005); OSBU (M. Lepší et P. Lepší, No. 1006).

Etymology

The name of the species “kletensis” refers to the mountain Kleť (1084.2 m a.s.l.), located NW of the town Český Krumlov (South Bohemia). The species was recorded for the first time at the foot of this mountain and the centre of its distribution is situated in the wide surroundings of this mountain. The epithet “kleťský” is proposed by the authors for the Czech name.

Diagnostic characters

Rubus kletensis has almost glabrous and generally glaucous stems, with sessile up to short-stalked glands on the grain. Stem prickles are small, only (1.2–) 1.5–3.0 (–3.5) mm long, of a curved to hooked shape, thick at the base and with a short thin point. The leaves are sharply, coarsely and doubly serrated (sometimes with shallow lobes), hairy to the touch on the lower surface, nerves with pectinately arranged hairs. The leaflets of inflorescence leaves are narrowly obovate. The petals are glabrous. The most similar species is *R. hadracanthos*, which

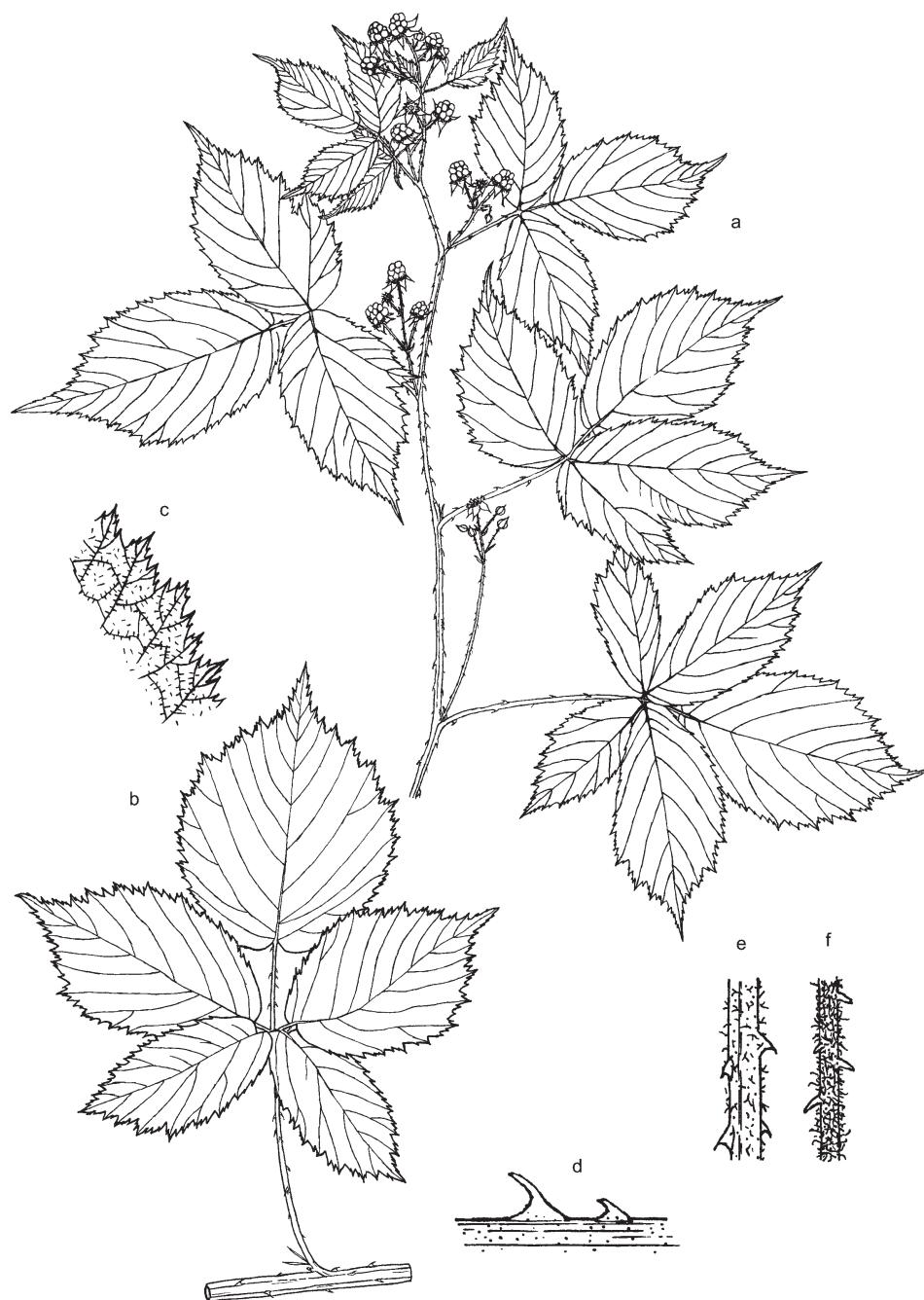


Fig. 1. – *Rubus kletensis*: a – infructescence; b – leaf; c – margin of terminal leaflet; d – prickle; e – inflorescence axis; f – peduncle. Del. P. Lepší.

differs in having bigger, straight to slightly curved prickles, only 2–3 mm deep incisions of leaf margin and pink petals. *Rubus josefianus* has, unlike *R. kletensis*, larger and many more prickles and the lower surface of leaves is not hairy to the touch.

Ecology and synecology of the species

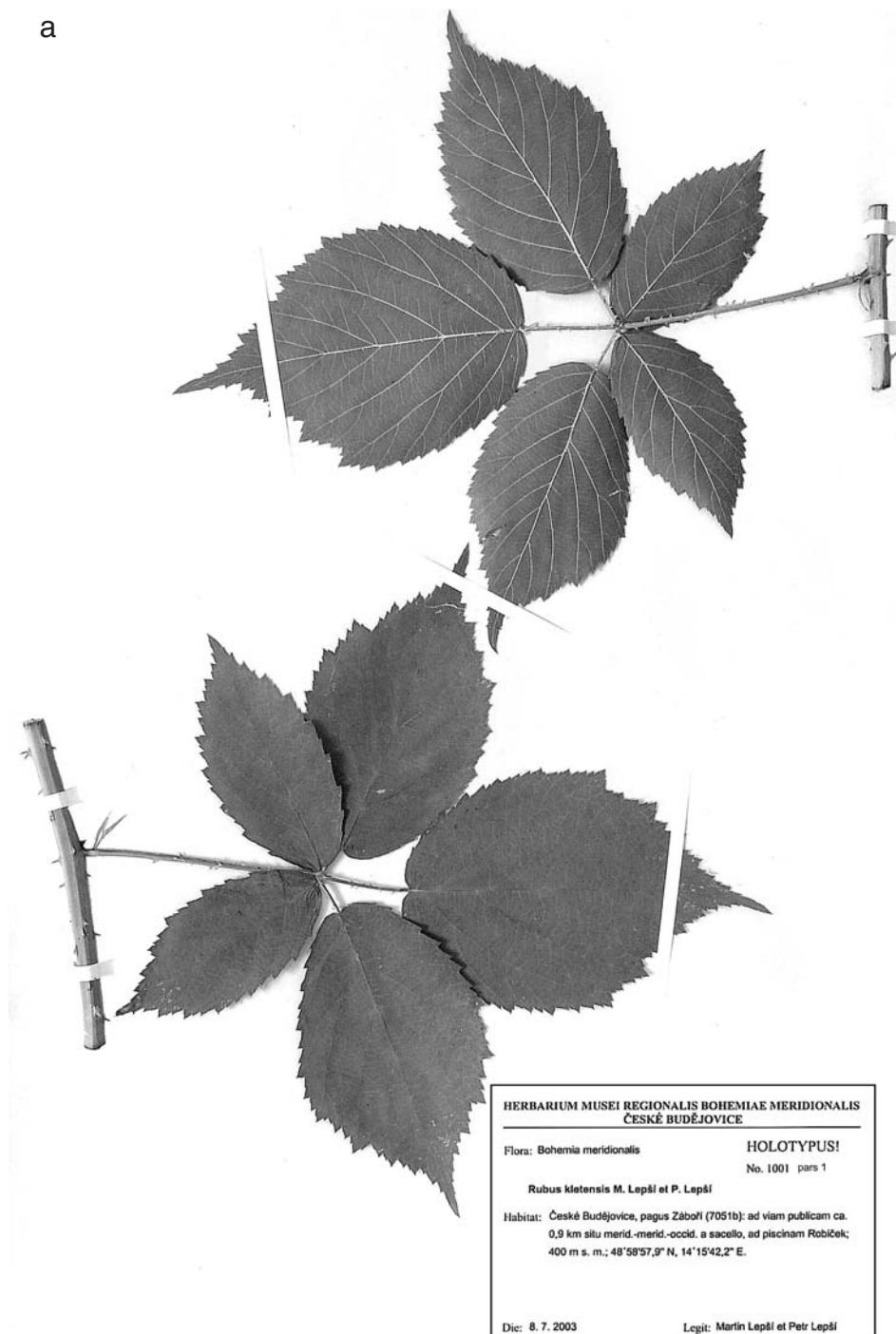
This species grows most frequently in completely open and sunny biotopes (thamnophilous ecoelement), especially in roadside ditches. Less often it grows in semi-shaded sites such as shrublands, growths of pioneer saplings or forest plantations. It is remarkable in that it occurs in wet and nutrient-rich sites – stream floodplains, wet ditch edges and banks of ponds. Quite often it occurs in villages. *Rubus kletensis* only rarely grows together with other bramble species – *R. bifrons*, *R. caesius*, *R. clusii*, *R. idaeus*, *R. nessensis* s. str., *R. ser. Glandulosi*.

It occurs most often (and often dominates, too) in ruderal communities of the class *Galio-Urticetea*. This vegetation is either very species-poor – with a complete dominance of nitrophilous and ruderal species of the *Galio-Urticetea* (Table 1, relevés 1–3), or, in addition to ruderal species, it may contain a higher proportion of meadow species of the *Molinio-Arrhenatheretea* (relevés 4–10) (transition vegetation between *Galio-Urticetea* and ruderal *Molinio-Arrhenatheretea*). The second most species-rich group could be further divided into communities with hydrophilous species of the *Molinietalia*, e.g. *Filipendula ulmaria*, *Lysimachia vulgaris*, *Angelica sylvestris* (relevés 7–10), or those with mainly mesophilous species of the *Arrhenatheretalia*, but without species of wet habitats (relevés 4–6). The species was also found at the edge of degraded mesophilous woodland (*Trifolion medii*) (relevé 11) and shrubland in communities: *Pruno-Rubion radulae* Weber 1974 (relevé 12), *Sambuco-Salicion capreae* (relevés 13–14), *Berberidion* (no relevés were recorded). Exceptionally, it grows in open forest plantations (relevé 15), where it creates sparse, weak but fertile growths; there the species occurs outside the range of its ecological optimum. It frequently occurs in other communities that cannot be classified, such as growths of pioneer or planted trees (relevés 16–17).

Distribution

So far the species has been collected in the area of South Bohemia and Upper Austria. The centre of its known distribution in South Bohemia is the lower altitudes of the piedmont of the Bohemian Forest and the Novohradské Mountains (Šumavsko-novohradské podhůří), from where it overlaps marginal areas of adjacent phytogeographical units – the Basin of České Budějovice (Budějovická pánev) and the region of Blatná (Blatensko). There, the species occurs at two places, 35 km apart (Fig. 3). The first and larger area includes 50 localities and is situated between Český Krumlov and Lhenice. The species occurs rather scattered there; it is more frequent only in the surroundings of the village of Záboří, where there are large populations. The other area, which is significantly smaller (6 larger localities) is located in the surroundings of the villages of Rohozná and Chrášťovice (close to Strakonice). In Upper Austria the species was found only at two isolated localities, by Haslach an der Mühl (Mühlviertel) and by Pischelsdorf am Engelbach close to Mattighofen (Innviertel). As relatively little is known about the distribution of *Rubus* species in Upper Austria, it is likely it occurs there at other localities.

a



HERBARIUM MUSEI REGIONALIS BOHEMIAE MERIDIONALIS
ČESKÉ BUDĚJOVICE

Flora: Bohemia meridionalis

HOLOTYPE!

No. 1001 pars 1

Rubus kletensis M. Lepší et P. Lepší

Habitat: České Budějovice, pagus Záboří (7051b); ad viam publicam ca.
0,9 km situ merid.-merid.-occid. a sacello, ad piscinam Robiček;
400 m s. m.; 48°58'57,9" N, 14°15'42,2" E.

Die: 8. 7. 2003

Legit: Martin Lepší et Petr Lepší

b

HERBARIUM MUSEI REGIONALIS BOHEMIAE MERIDIONALIS
ČESKÉ BUDĚJOVICE

Flora: Bohemia meridionalis

HOLOTYPE!

No. 1001 pars 2

Rubus kletensis M. Lepší et P. LepšíHabitat: České Budějovice, pagus Záboří (7051b); ad viam publicam ca.
0,9 km situ merid.-merid.-occid. a sacello, ad piscinam Robiček;
400 m s. m.; 48°58'57,9" N, 14°15'42,2" E.

Dig: 8. 7. 2003

Legit: Martin Lepší et Petr Lepší

Fig. 2. – *Rubus kletensis* M. Lepší et P. Lepší, holotypus (CB), (a) herbarium sheet 1 (leaves of the holotype specimen), (b) herbarium sheet 2 (the inflorescence of the holotype specimen).

Table 1. – Phytosociological relevés of vegetation with *Rubus kletensis*.

Other species:

<i>Poa palustris</i>	r	1	+	.	2m	+	r	.	r	.	r	.	.	.	r	.
<i>Cirsium arvense</i>	1	2m	r	.	r	.	2a	2m	2m	1	.	.	.	.	.	.
<i>Calamagrostis epigejos</i>	2a	.	2a	.	2b	4	.	.	.	.	1	.	.	.	.	.
<i>Hypericum perforatum</i>	r	.	.	2a	r	.	.	.	.	.	r	.	.	.	.	.
<i>Galium verum</i> s. str.	.	.	.	1	.	.	.	.	.	2m	1	.	.	.	.	+
<i>Holcus mollis</i>	.	2a	.	.	r	.	.	.	.	2m	.	.	.	.	.	.
<i>Aegopodium podagraria</i>	.	1	.	.	.	.	.	.	.	2a	.	2a	.	.	.	.
<i>Galium ×pomeranicum</i>	.	.	.	2a	1	.	.	.	.	2m	.	.	.	.	.	.
<i>Quercus robur</i> juv.	.	.	.	.	r	.	.	.	.	1	.	r	.	.	.	.
<i>Daucus carota</i>	.	.	+	.	.	.	.	.	.	r	.	.	.	.	.	.
<i>Convolvulus arvensis</i>	.	.	r	.	.	.	.	.	.	.	.	1	.	.	.	.
<i>Deschampsia cespitosa</i>	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.
<i>Rosa canina</i> juv.	.	.	.	2m	.	.	.	.	.	.	.	.	.	r	.	.
<i>Hypericum maculatum</i>	.	.	.	1	.	.	r	.	.	.	.	.	.	.	.	.
<i>Epilobium angustifolium</i>	.	.	.	.	2m	.	2a	.	.	.	.	.	.	.	.	.
<i>Selinum carvifolia</i>	.	.	.	.	.	r	.	.	.	r	.	.	.	.	.	.
<i>Cuscuta europaea</i>	.	.	.	.	.	.	.	2m	.	.	.	+	.	.	.	.
<i>Angelica sylvestris</i>	.	.	.	.	.	.	.	2m	.	.	.	r	.	.	.	.
<i>Veronica chamaedrys</i>	.	.	.	.	.	.	.	.	r	.	.	r	.	.	.	.
<i>Acer platanoides</i> juv.	.	.	.	.	.	.	.	.	r	.	.	.	.	r	.	.
<i>Avenella flexuosa</i>	.	.	.	.	.	.	.	.	.	.	.	3	.	2a	.	.
<i>Vaccinium myrtillus</i>	.	.	.	.	.	.	.	.	.	.	.	2b	.	1	.	.
<i>Melampyrum pratense</i>	.	.	.	.	.	.	.	.	.	.	.	1	.	+	.	.

In one relevé only: **E₃**: *Robinia pseudacacia* 3: 2b, *Pinus sylvestris* 15: 3, *Quercus robur* 16: 3, *Alnus glutinosa* 16: 2a, *Betula pendula* 17: 3. **E₂**: *Malus domestica* 11: 2a, *Ligustrum vulgare* 12: 2a, *Prunus spinosa* 12: 2a, *Picea abies* 15: 2a, *Salix aurita* 15: 2a, *Rosa canina* 16: 2a, *Salix cinerea* 16: 2a, *Betula pendula* 17: 2m. **E_R**: *Rubus bifrons* 3: 2b, *Rubus nessensis* s. str. 5: 2m, *Rubus* ser. *Glandulosi* 13: 2m, *Rubus clusii* 17: 2a. **E₁**: *Fraxinus excelsior* juv. 1: 1, *Poa trivialis* 2: 2a, *Rumex obtusifolius* 2: 2m, *Impatiens parviflora* 2: 1, *Plantago lanceolata* 3: r, *Robinia pseudacacia* juv. 3: r, *Euphorbia esula* 4: 2m, *Phleum pratense* 4: 1, *Allium vineale* 4: r, *Torilis japonica* 5: 2m, *Rumex crispus* 5: r, *Vicia cracca* 6: 2a, *Galium mollugo* agg. 6: +, *Phyteuma nigrum* 6: r, *Sanguisorba officinalis* 6: r, *Alliaria petiolata* 7: 1, *Prunus avium* juv. 7: r, *Prunus spinosa* juv. 7: r, *Geranium palustre* 8: 2a, *Scrophularia nodosa* 8: 2m, *Lotus uliginosus* 8: 1, *Cirsium palustre* 9: 1, *Clinopodium vulgare* 10: r, *Holcus lanatus* 10: r, *Trifolium medium* 11: 2m, *Carex contigua* 11: 1, *Lamium maculatum* 13: 2a, *Senecio ovatus* 13: 2m, *Poa nemoralis* 13: 2a, *Ranunculus repens* 13: r, *Phalaris arundinacea* 14: 1, *Poa* sp. 14: r, *Vaccinium vitis-idaea* 15: 2a, *Luzula pilosa* 15: 2m, *Molinia caerulea* 15: 2m, *Potentilla erecta* 15: 2m, *Anemone nemorosa* 15: 1, *Frangula alnus* juv. 15: +, *Dryopteris dilatata* 15: r, *Hieracium murorum* 15: r, *Nardus stricta* 15: r, *Populus tremula* juv. 15: r, *Rumex acetosa* 16: 2a, *Melica nutans* 17: 3, *Brachypodium pinnatum* 17: 2a, *Pteridium aquilinum* 17: 2b, *Euphorbia cyparissias* 17: +, *Acer pseudoplatanus* juv. 17: r, *Sorbus aucuparia* juv. 17: r, *Viola canina* 17: r.

Localities of the relevés: **1**. Záboří: ca 0.2 km NW of the chapel, on the western periphery of the village, 9. 7. 2003. **2**. Křemže: on the SW periphery of the village of Krasetín, 9. 7. 2003. **3**. Holašovice: on the southern periphery of the village, along the road between the village of Holašovice and the lonely house U Vacla, 9. 7. 2003. **4**. Záboří: 0.9 km SE of the chapel, along the road to the village of Čakov, 9. 7. 2003. **5**. Holašovice: ca 1 km SW of the chapel, along the road between the village of Holašovice and the lonely house U Vacla, 9. 7. 2003. **6**. Brloh: Nová Ves, along the road ca 0.4 km NE of the hill Výhledy, 9. 7. 2003. **7**. Záboří: ca 1.1 km SSW of the chapel at the pond Robiček, the road margin, 9. 7. 2003. **8**. Záboří: ca 1 km SSW of the chapel, at the pond Robiček, on the dam, 9. 7. 2003. **9**. Záboří: ca 0.9 km SSW of the chapel at the pond Robiček, 9. 7. 2003. **10**. Kamenný Újezd: at the pond ca 0.5 km NNW of the centre of village of Opalice, next to the dam, 23. 9. 2002. **11**. Záboří: ca 2.2 km ESE of the chapel, along the road to the village of Čakov, 9. 7. 2003. **12**. Záboří: ca 0.3 km NW of the chapel, along the road between the villages of Záboří and Dobčice, 9. 7. 2003. **13**. Křemže: ca 0.5 km SSW of the railway station, along the road between the villages of Mříč and Holubov, the road margin in the forest, 28. 8. 2002. **14**. Kamenný Újezd: at the pond ca 0.5 km NNW of the centre of the village of Opalice, on the dam, 23. 9. 2002. **15**. Křemže: ca 1.9 km NE of the railway station, along the road to the village of Vrábče, the road margin in the forest, 9. 7. 2003. **16**. Záboří: ca 1 km SSW of the chapel, at the pond Robiček, next to the road, 9. 7. 2003. **17**. Zlatá Kořuna: ca 0.8 km NW of the chapel in the village of Srnín, on the woodland edge, 25. 8. 2002.

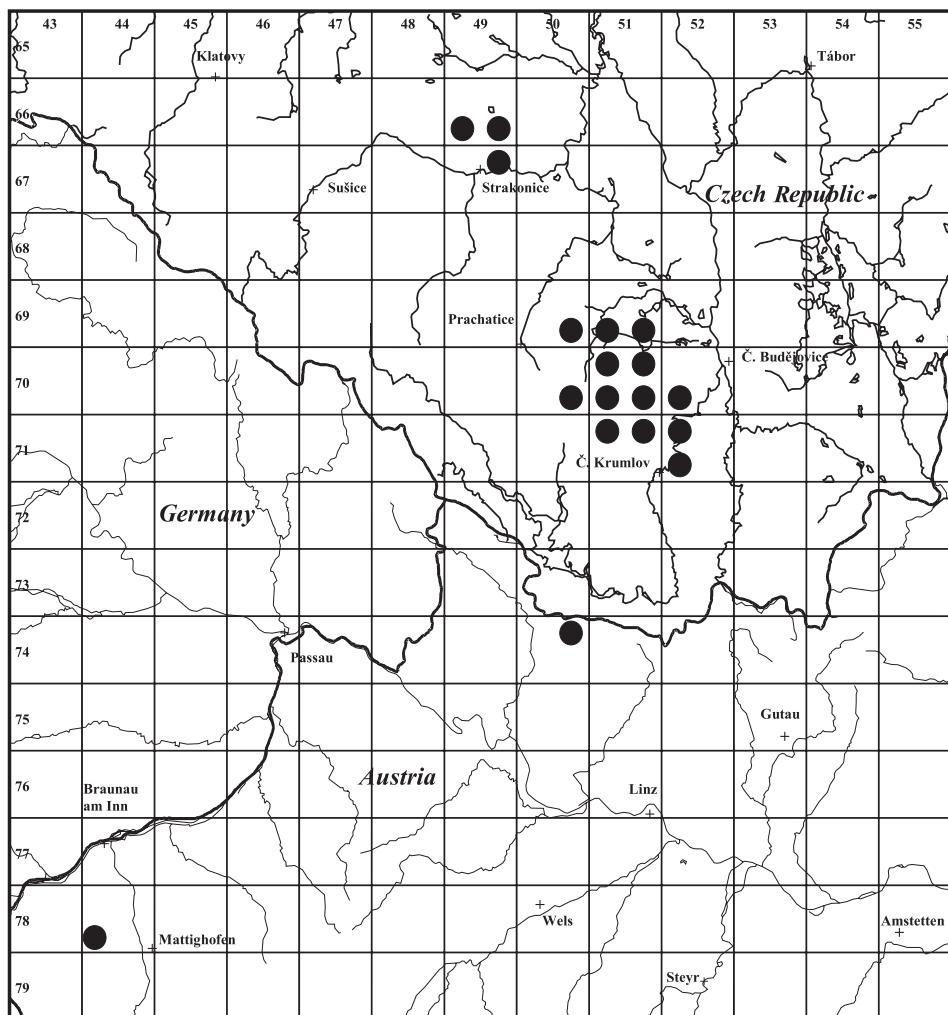


Fig. 3. – Distribution map of *Rubus kletensis*.

Rubus kletensis could be considered a regional species (Weber 1996) – the distance between the most distant localities exceed almost 150 km (the northernmost locality is in Chrášťovice by Radomyšl, the easternmost one by Opalice, and both the southernmost and the westernmost locality is by Pischeldorf am Engelbach close to Mattighofen). The species was found in 11 squares ($10' \times 6'$) of the Central European grid and in the Czech Republic it occurs in 8 phytogeographical units (districts and sub-districts). Most of the localities are situated at the supracolline altitudinal belt of the Mesophyticum phytogeographical region, only rarely at lower levels of the submountain belt. In terms of altitude the localities range from 420 to 725 metres a.s.l.

Herbarium specimens:

Czech Republic, Bohemia: M e s o p h y t i c u m: **35d. Březnické Podbrdsko.** Radomyšl: in the village of Rohozná, 6649d, 450 m a. s. l. (30. 7. 1999 coll. V. Žíla, herb. V. Žíla). **36a. Blatensko.** Radomyšl: ca 0.5 km N of the village of Chrášťovice, along the field road, 6649c, 540 m a. s. l. (8. 8. 1996 coll. V. Žíla, herb. V. Žíla); Radomyšl: ca 1.9 km NW of the chapel, along the road to the village of Chrášťovice, 6649c, 480 m a. s. l. (6. 8. 2002 coll. P. Lepší, herb. P. Lepší). **37i. Chvalinské Předšumaví.** Dobčice: ca 0.4 km SE of the chapel, along the road to the village of Lipanovice, 7051a, 480 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Dobčice: ca 0.9 km NW of the chapel, along the road to the village of Horní Chrášťany, 6951c, 530 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Chvalšiny: ca 0.5 km NNE of the Mlýnský vrch hill, along the road between the villages of Chvalšiny and Smědeč, 7151a, 630 m a. s. l. (30. 7. 2002 coll. M. Lepší, CB); Lhenice: along the road in the village of Hradce, 6950d, 530 m a. s. l. (2. 7. 2001 coll. P. & M. Lepší, herb. P. Lepší); Lhenice: ca 1.7 km NNW of the church, along the road to the village of Hradce, 6950d, 530 m a. s. l. (13. 9. 2002 coll. P. & M. Lepší, herb. P. Lepší). **37j. Blanský les.** Brloh: at the cow-shed on the E periphery of the village of Nová Ves, 7051d, 560 m a. s. l. (17. 7. 2002 coll. M. Lepší, CB); Brloh: ca 0.8 km WSW of the church, along the local road in the alluvium of the Dobročkovský potok brook, 7051c, 570 m a. s. l. (24. 10. 2002 coll. M. Lepší, CB); Brloh: ca 1.2 km SE of the chapel in the village of Nová Ves, along the field road, 7051d, 590 m a. s. l. (17. 7. 2002 coll. M. Lepší, CB); Brloh: in the village ca 0.1 km NW of the church, along the road to the villages of Jaronín and Nová Ves, 7051c, 580 m a. s. l. (18. 7. 2002 coll. M. Lepší, CB); Brloh: Nová Ves, along the road ca 0.4 km NE of Výhledy hill, 7051b, 570 m a. s. l. (21. 7. 2002 coll. M. Lepší, CB); Křemže: ca 0.5 km NW of the chapel in the village of Bohouškovice, along the field road, 7051d, 580 m a. s. l. (9. 9. 2000 coll. P. Lepší, herb. P. Lepší); Křemže: ca 0.6 km NW of the centre of the village of Lhotka, along the road between the villages of Lhotka and Loučej, 7051d, 580 m a. s. l. (23. 7. 2001 coll. P. Lepší, herb. P. Lepší); Křemže: on the SW periphery of the village of Krasetín, 7151b, 580 m a. s. l. (29. 7. 2002 coll. P. & M. Lepší, herb. P. Lepší); Zlatá Koruna: ca 0.8 km NW of the chapel of the village of Srní, on the woodland edge, 7152c, 610 m a. s. l. (7. 7. 2001 coll. P. & M. Lepší, herb. P. Lepší). **37k. Křemžské hadce.** Křemže: ca 0.5 km SSW of the railway station, along the road between the villages of Mříč and Holubov, the road margin in the forest, 7051d, 520 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Křemže: ca 0.4 km SSW of the Holubovský Mlýn mill, on the woodland edge, 7151b, 500 m a. s. l. (7. 7. 2001 coll. M. Lepší, herb. P. Lepší); Křemže: ca 1.9 km NE of the railway station, along the road to the village of Vrábče, the road margin in the forest, 7052c, 530 m a. s. l. (25. 7. 2002 coll. M. Lepší, CB); Křemže: ca 1 km NNE of the railway station, along the road to the village of Vrábče, 7052c, 540 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB). **37l. Českokrumlovské Předšumaví.** Kamenný Újezd: at the pond ca 0.5 km NNW of the centre of the village of Opalice, 7152a, 480 m a. s. l. (28. 6. 2002 coll. P. Lepší, herb. P. Lepší); Zlatá Koruna: ca 0.4 km SW of the chapel of the village of Rájov, in the bush along the road between the towns of Český Krumlov and České Budějovice, 7152c, 470 m a. s. l. (28. 9. 2002 coll. M. Lepší, CB). **38. Budějovická pánev.** Dubné: in the village of Čakov, 7051b, 440 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Dubné: ca 0.4 km SE of the chapel in the village of Čakov, the woodland edge along the road between the villages of Čakov and Čakov, 7051b, 450 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Holašovice: ca 1 km SW of the chapel, along the road between the village of Holašovice and the lonely house U Vacla, 7051b, 520 m a. s. l. (21. 7. 2002 coll. M. Lepší, CB); Netolice: in the village of Chvalovice, 6951c, 470 m a. s. l. (9. 10. 1999 coll. V. Žíla, herb. V. Žíla); Radošovice: ca 0.35 km of the centre of the village, along the road to the village of Němcice, 6951d, 440 m a. s. l. (29. 7. 2002 coll. M. Lepší, CB); Záboří: ca 1.4 km SE of the chapel, along the road to the village of Čakov, 7051b, 440 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Záboří: ca 2.2 km ESE of the chapel, along the road to the village of Čakov, 7051b, 430 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB); Záboří: ca 0.25 km WNW of the hill Zádušní vrch, along the local road to the village of Strýčice, 6951d, 440 m a. s. l. (26. 7. 2002 coll. M. Lepší, CB); Záboří: ca 0.2 km NW of the chapel, on the W periphery of the village, 7051b, 440 m a. s. l. (24. 7. 2002 coll. M. Lepší, CB).

Austria, Upper Austria: **Mühlviertel.** Haslach an der Mühl: along the road near to the village of Raiden (between the town of Haslach an der Mühl and the village of Helfenberg), 7450b, 580 m a. s. l. (28. 9. 2002 coll. V. Žíla, herb. V. Žíla, CB). **Innviertel.** Mattighofen: Pischelsdorf am Engelbach: along the road S of the village of Steckenbach, 7844c, 460 m a. s. l. (15. 7. 1999 coll. V. Žíla, herb. V. Žíla, CB).

Recorded localities:

Czech Republic, Bohemia: M e s o p h y t i c u m: **35d. Březnické Podbrdsko.** Radomyšl: in the bush along the field road ca 0.6 km SW of the chapel in the village of Rohozná, 6749b, 460 m a. s. l. (6. 8. 2002 not. P. Lepší). **37f. Strakonické vápence.** Radomyšl: ca 0.6 km NNE of the chapel in the village of Podolí, along the road between the villages of Chrášťovice and Podolí, 6649c, 470 m a. s. l. (6. 8. 2002 not. P. Lepší). **37i. Chvalinské Předšumaví.** Záboří: ca 0.95 km S of the centre of the village of Lipanovice, along the road, 7051a, 500 m a. s. l.

(24. 7. 2002 not. M. Lepší); Záboří: ca 0.6 km NNW of the centre of the village of Lipanovice, along the road, 7051a, 490 m a. s. l. (24. 7. 2002 not. M. Lepší); Záboří: ca 0.9 km SE of the chapel of the village of Dobčice, along the road between the villages of Lipanovice and Dobčice, 7051a, 480 m a. s. l. (24. 7. 2002 not. M. Lepší); Ktiš: ca 1.9 km NE of the church, along the road to the village of Smědeč, 7050d, 690 m a. s. l. (7. 8. 2004 not. M. Lepší). **37j. Blanský les.** Křemže: ca 0.5 km N of the centre of the village of Krasetín, along the local road between the villages of Krasetín and Holubov, 7151b, 540 m a. s. l. (9. 9. 2000 not. P. & M. Lepší); Křemže: at the pond in the village of Bohouškovice, 7051d, 570 m a. s. l. (5. 7. 2001 not. P. Lepší); Brloh: ca 0.5 km W of the centre of the village of Kuklov, along the road to the village of Smědeč, 7051c, 725 m a. s. l. (7. 8. 2004 not. M. Lepší). **37k. Křemžské hadce.** Chmelná: ca 1.1 km SE of the chapel, along the road to the village of Stupná, 7051d, 540 m a. s. l. (19. 7. 2004 not. M. Lepší); Křemže: ca 1.1 km S of the church, in the forest, in the Nature Reserve Bořinka, 7151b, 440 m a. s. l. (10. 7. 2004 not. M. Lepší). **38. Budějovická pánev.** Holašovice: on the S periphery of the village, along the road between the village of Holašovice and the lonely house U Vacla, 7051b, 510 m a. s. l. (21. 7. 2002 not. M. Lepší); Strýčice: on the SW periphery of the village, along the road to the village of Dobčice, 6951d, 420 m a. s. l. (24. 7. 2002 not. P. & M. Lepší); Strýčice: at the pond ca 0.5 km SSE of the church, 6951d, 420 m a. s. l. (29. 7. 2002 not. M. Lepší); Záboří: continuous ca 0.5–1.2 km SE of the chapel, along the road to the village of Čakov, 7051b, 420 m a. s. l. (24. 7. 2002 not. M. Lepší); Záboří: ca 0.7 km N of the chapel, along the road to the village of Strýčice, 7051b, 430 m a. s. l. (29. 7. 2002 not. M. Lepší); Záboří: ca 0.8 km NW of the chapel, along the road to the village of Dobčice, 7051b, 460 m a. s. l. (24. 7. 2002 not. M. Lepší); Záboří: ca 0.6 km ESE of the centre of the village of Lipanovice, along the road between the villages of Holašovice and Lipanovice, 7051b, 470 m a. s. l. (29. 7. 2002 not. M. Lepší); Jankov: ca 0.3 km SSW of the chapel, along the road to the lonely house U Beneda, 7051b, 500 m a. s. l. (30. 7. 2004 not. M. Lepší); Jankov: ca 0.5 km NW of the chapel, along the road to the village of Borovka, 7051b, 480 m a. s. l. (30. 7. 2004 not. M. Lepší); Jankov: crossroad next to the village of Borovka, 7051b, 470 m a. s. l. (30. 7. 2004 not. M. Lepší); Záboří, ca 1.4 km ENE of the chapel, margin of the forest near to the lonely house Curna, 7051b, 440 m a. s. l. (30. 7. 2004 not. M. Lepší).

Acknowledgements

We thank V. Žila for information about the new localities of *Rubus kletensis* and for arranging the revision of the specimens. We are grateful to B. Trávníček for his valuable notes, advice and revision of specimens. Further thanks are due to D. Zelený and I. Marek for their help with the translation of the paper into English and to K. Boublík for his help with the phytosociological evaluation of the species. Tony Dixon kindly edited the English. We are also indebted to H. E. Weber for his revision of specimens.

Souhrn

V příspěvku je popsán nový druh ostružiníku *Rubus kletensis* M. Lepší et P. Lepší (ostružník kleťský) ze série *Sepincola* ze sekce *Corylifolia* (viz obr. 1–2). Diagnostické znaky: druh je nápadný a poměrně dobře poznatelný díky téměř lysým a zpravidla ojíněným prýtům, které mají na povrchu přisedlé až krátce stopkaté žlázkы. Ostny na prýtech jsou drobné, jen (1,2)–1,5–3,0 (–3,5) mm dlouhé, zahnuté až hákovičité, na bázi silné a vybíhají v krátkou, tenkou špičku. Listy jsou ostře, hrubě dvakrát pilovité (někdy až slabě laločnaté), na rubu na dotek zřetelně chlupaté, s žilkami s hřebínkovitě uspořádanými chlupy. Lístky listů v květenství jsou úzce obvejčité. Druh je nejvíce podobný *R. hadracanthos*, který se liší listovým okrajem se zárezy jen 2–3 mm hlubokými, většími, rovnými až mírně zahnutými ostny a růžovými korunními listky. Ostružník *R. josefianus* má na rozdíl od *R. kletensis* větší ostny, vyšší počet ostnů a listy jsou na dotek nezřetelně chlupaté.

Podle velikosti areálu (vzdálenost mezi nejodlehlejšími lokalitami je necelých 150 km) patří *R. kletensis* mezi regionální druhy (cf. Weber 1996). Druh svým rozšířením zasahuje do jedenácti základních polí středoevropské mapovací sítě (viz obr. 3) a v ČR do osmi fytochorionů. V jižních Čechách (56 lokalit) je vázán na nižší polohy Šumavsko-novohradského podhůří odkud přesahuje do okrajových částí navazujících fytochorionů, Českobudějovické pánve a Blatenské pahorkatiny. Většina lokalit leží v suprakolinním, vzácně v nejnižších polohách submontánního stupně mezofytika. Výškové rozpětí lokalit je od 420 do 725 m n. m. V Rakousku byl dosud zaznamenán pouze na dvou vzájemně izolovaných lokalitách (Mühlviertel, Innviertel).

Druh roste především na vlhčích eutrofních, synantropních a oslněných biotopech (thamnofilní ekoloelement). Nejčastěji se vyskytuje ve společenstvech třídy *Galio-Urticetea*, dále byl zaznamenán ve společenstvech svazů *Trifolion medii*, *Sambuco-Salicion capreae*, *Pruno-Rubion radulae*, *Berberidion* a výjimečně v lesních kulturách, popř. v porostech náletových dřevin (viz tab. 1).

References

- Anonymous (2000): Geobáze® Prohlížeč Professional Verze 2.8. – Geodézie ČS a. s., Česká Lípa.
- Ehrendorfer F. & Hamann U. (1965): Vorschlage zu einer floristischen Kartierung von Mitteleuropa. – Ber. Deutsch. Bot. Ges. 78: 35–50.
- Holub J. (1995): 4. *Rubus* L. – ostružník (maliník, moruška, ostružinec, ostružiníček). – In: Slavík B. (ed.), Květena České republiky 4: 54–206, Academia, Praha.
- Holub J. & Kučera T. (2001): Vegetace ostružiníků ČR – první přiblížení. – Zpr. Čes. Bot. Společ. 35 (2000): 213–226.
- Kubát K., Hrouda L., Chrtěk J. jun., Kaplan Z., Kirschner J. & Štěpánek J. (eds.) (2002): Klíč ke květeně České republiky. – Academia, Praha.
- Moravec J., Balátová-Tuláčková E., Blažková D., Hadač E., Hejný S., Husák Š., Jeník J., Kolbek J., Krahulec F., Kropáč Z., Neuhäusl R., Rybníček K., Řehořek V. & Vicherek J. (1995): Rostlinná společenstva České republiky a jejich ohrožení. Ed. 2. – Severočes. Přír., suppl. 1995: 1–206.
- Skalický V. (1988): Regionálně fytogeografické členění. – In: Hejný S. & Slavík B. (eds.), Květena České socialistické republiky 1: 103–121, Academia, Praha.
- Weber H. E. (1973): Die Gattung *Rubus* L. (*Rosaceae*) im nordwestlichen Europa. – Phanerogamarum Monogr. 7 (1972): 1–504, Lehre.
- Weber H. E. (1981): Revision der Sektion *Corylifoliae* (Gattung *Rubus*, *Rosaceae*) in Skandinavien und im nördlichen Mitteleuropa. – Sonderbände Naturwiss. Ver. Hamburg 4: 1–229, P. Parey.
- Weber H. E. (1995): 4. *Rubus*. – In: Weber H. E. (ed.), Gustav Hegi, Illustrierte Flora von Mitteleuropa, Ed. 3, Vol. 4/2A: 284–595, Blackwell Wissenschafts-Verlag, Berlin, Oxford etc.
- Weber H. E. (1996): Former and modern taxonomic treatment of the apomictic *Rubus* complex. – Folia Geobot. Phytotax. 31: 373–380.
- Weber H. E. (2000): 1212–1545 *Rubus* L. – In: Haeupler H. & Muer T. (eds.), Bildatlas der Farn- und Blütenpflanzen Deutschlands: 238–285, Verlag Eugen Ulmer, Stuttgart.
- Westhoff V. & van der Maarel E. (1973): The Braun-Blanquet approach. – In: Whittaker R. H. (ed.), Ordination and classification of communities, Handbook of vegetation science, 5: 619–726, Dr. W. Junk b.v.-Publishers, The Hague.

Received 6 February 2005

Revision received 15 August 2005

Accepted 15 August 2005