

Němcia, a new genus of the Leguminosae.

By Karel Domin.

The definition of the genus *Oxylobium* ANDR. by different authors is very different, although of late the broad conception of BENTHAM is almost universally accepted. F. v. MUELLER who though he accepts *Podolobium* in his earlier works as a separate genus, suggests already in *Fragm. I.* 75 (1859) that this genus together with *Oxylobium* might be joined to *Chorizema* and later (*Fragm. X.* 35, 1876) even proposes to unite the genera *Chorizema*, *Oxylobium*, *Gastrolobium*, *Mirbelia* and *Isotropis* under the single genus *Chorizema*, which surely is not advisable. L. DIELS (in *Engl. Bot. Jahrb.* XXXV. p. 221—223, 251—252, 1904) studied in detail the relations of the different Series distinguished by BENTHAM and came to the conclusion, which is in my opinion entirely justified, that the Series *Gastroloboideae* of BENTHAM is considerably different from BENTHAM'S first 4 Series and is perfectly congruent with the genus *Gastrolobium* except of the number of ovules. This convergence goes so far that in both series we meet with analogical species, which cannot be distinguished by their habits. Because of this DIELS thinks it advisable either to define the genus *Oxylobium* in the broadest sense — in which case the most distant genus *Gastrolobium* would have to be united with it —, or, which DIELS would prefer, to separate the group *Gastroloboideae* of the genus *Oxylobium* as a parallel genus to *Gastrolobium*. After new examination of the majority of the *Oxylobium*-species I consider this separation as entirely justified, as too broad a conception of the genus *Oxylobium* (including *Gastrolobium*) would hardly help clear up the relations of this group of *Podalyriaceae*. Undeniably the phylogenetic relations of *Oxylobium Chorizema*, *Gastrolobium* and the new genus *Němcia* are very close.

The generic name *Oxylobium* ANDR. *Bot. Repos.* t. 492 (1809) was replaced by some authors, for instance O. KUNTZE (*Revisio Gen. Plant.* 167—168, 1891), TAUBERT (in *Engler-Prantl Nat. Pflanzenfam.* III. 3 p. 205, 1894) by the older name *Callistachys* VENT. *Jard. Malm.* t. 115 (1803). Because the name *Oxylobium* was put in the list of the „nomina conservanda“ (cf. *Règles internat. Nomencl. bot.* p. 81, 1905), I consider its preservation as justified. BENTHAM'S (*Fl. Austr.* II. 16, 1864) *Oxylobium Callistachys* (= *Callistachys lanceolata* VENT. *Jard. Malm.* t. 115 [1803], *Chorizema Callistachys* F. v. MUELL. *Fragm.* IV. 18 [1863]) must be designated as ***Oxylobium lanceolatum*** n. comb. and *Oxylobium li-*

neare BENTH. Fl. Austr. II. 17 (1864) (= *Callistachys linariaefolia* DON Gen. Syst. II. 117 [1832], *Callistachys linearis* BENTH. in Hueg. Enum. 27 [1837], *Chorizema lineare* F. v. MUELL. Fragm. IV. 17 [1863]) as **Oxylobium linariifolium** n. comb.

In the new comprehensive study on the system of the *Leguminosae* by LOUIS CAPITAINE (Étude analytique et phytogéographique du groupe des Légumineuses, edited by Acad. Intern. Géogr. Botan., Paris 1912) the genus *Oxylobium* is defined in the same broad limits as by BENTHAM without respecting the remarks made by DIELS.

Němcia n. gen.

Genus Podalyricarum, *Oxylobio* et *Gastrolobio* proxime affine; calycis lobi 2 superiores altius connati, 3 inferiores longiores tubum subaequant; petala unguiculata; vexillum orbiculare vel transversum; alae oblongae; carina leviter incurva alas subaequans; stamina libera; ovarium villosum vel villosissimum, stipitatum, 4 raro 6-ovulatum; stylus filiformis vel basi dilatatus, stigmatem parvo terminatus; legumen parvum turgidum, haud septatum; semina strophiolata (vel raro estrophiolata sed tunc legumen substantia cellulosa forsitan strophiolium mutatum exhibente impletum).

Frutices rigidae, omnes Australiae occidentalis incolae, foliis oppositis vel 3—4-natis verticillatis, simplicibus, rigidis, crassiuscule coriaceis, stipulatis, stipulis setaceis, floribus conspicuis purpureis, luteis vel colore mixto, in fasciculos vel corymbos densos dispositis, rarius racemosis. Genus a *Gastrolobio* non nisi ovulorum numero diversum.

Genus hoc novum clarissimo Dri BOHUMIL NĚMEC, universitatis Carolinae Pragensis professori ordinario et de re botanica, praesertim physiologia ac cytologia optime merito, grato animo dedico.

1. **Němcia atropurpurea** n. comb.

Oxylobium atropurpureum TURCZ. in Bull. Soc. Nat. Mosc. XXVI. 1. 250 (1853), BENTH. Fl. Austr. II. 22. (1864), F. v. MUELL. First Census 33 (1882), Sec. Census 57 (1889), DIELS in Engl. Bot. Jahrb. XXXV. 224 (1904).

Callistachys atropurpurea O. Ktze. Rev. Gen. Pl. I. 168 (1891).

Habitat in Australia occidentali.

a) var **typica** (forma normalis grandifolia.)

W. A.: Warrunup Hill, Stirling Range, Capt. A. A. DORRIEN-SMITH.

b) var. **minorifolia** v. n.

Frutex rigidus, foliis in ramis florentibus anguste oblongo-ellipticis, cum petiolis plerumque 3.5—6 cm longis et 1—1.5 cm latis, rarius usque 8 cm longis et 2.5 cm latis, floribus magnis, vexillo circiter 2 cm longo.

W. A.: cum praecedenti.

2. **Němcia luteifolia** n. sp.

(*Oxylobium luteifolium* DOM. in sched. herb. Kew.)

Frutex rigidus, verosimiliter elatus, ramis crassis, juvenilibus subcompresso-biangulosis et appresse breviter sericeo-pilosis, vetustis sub-

teretibus, parce velutinis vel glabrescentibus; folia opposita, petiolata, rigida, crasse coriacea, late ovato-elliptica, apice rotundato-truncata et brevissime emarginata, basi contracta, sine petiolo 4—6.5 cm longa et 3—3.7 cm lata, utrinque glaberrima, subtus lutescentia, margine nervo cartilagineo duro undulato-crenulato et revoluta cincta, penninervia, costa subtus valde prominula, reticulatione densissima utrinque conspicua; petioli $\frac{3}{4}$ —1 cm longi, villosuli; stipulae setaceo-subulatae, atroviolaceae, petiolos adaequant, diu persistentes; flores superbi, numerosi, in fasciculos pedunculatos in axillis supremis congesti; pedunculi crassi, sulcati, apice dilatati, villosuli, circa 1 cm longi; bractaeae fere hemiglobosae, dense breviter pubescentes, mox deciduae; flores pedicellati; pedicelli 0.5 cm vel paulo plus longi, sericeo-villosi; calyx campanulatus, c. 12 mm longus, extus sericeo-villosissimus, intus glaber vel fere glaber et purpurascens; calycis lobi late oblongi, rufiduli, inferiores 3 longiores subacuti tubo albido subaequilongis, superiores 2 altius connati valde obtusi; corolla in sicco fusco-purpurea, 2 cm vel ultra longa; ovarium distincte stipitatum, pilis albis sericeis villosissimum, 4-ovulatum.

W. A.: Warrunup Hill, Stirling Range, leg. Capt. A. A. DORRIEN-SMITH (Herb. Kew).

Species *G. atropurpureae* certe valde affinis, sed jam foliatione, floribus tantum ad apicem caulorum in axillis fasciculatis etc. distinguenda.

3. *Nemcia vestita* n. sp.

Oxylobium vestitum DOM. in sched. herb. Kew.

Frutex rigidus, ramis crassis dense patentim villosis; folia opposita, in ramulis approximata, petiolata, crasse coriacea et rigidissima, late oblongo-elliptica usque fere orbicularia, apice obtusissima vel obtusa et interdum apiculata, basi obtusa, margine undulata et subrevoluta, subtus pube molli cano-albida dense vestita et ad costam villosissima, supra pube simili sed tenui et detersili instructa vel demum partim vel fere in tota superficie glabrata et in sicco lutescenti-viridia, penninervia et densissime subtiliter reticulata; petioli circa $\frac{3}{4}$ cm longi, albo-villosi; stipulae setaceo-subulatae, atropurpureae, curvulae, petiolis longiores, uno latere pilis albis longis densis barbatae; corymbi floriferi densi, numerosi, axillares, abbreviati, pedunculati; pedunculi 1, raro usque 2 cm longi, villosi; bractaeae cito caducae; flores pulchri, pedicellati; calyx (uti pedicelli) extus pilis albis argenteo-sericeis villosissimus circa 11—13 mm longus, intus glaberrimus, lobis 3 longioribus subacutis tubo paulo longioribus; corolla atropurpurea, fere 2 cm longa; ovarium breviter stipitatum, villosissimum, 4-vel interdum 6-ovulatum.

W. A.: Pass in Stirling Range, East of Mt. Toolbrunup, leg. Capt. A. A. DORRIEN-SMITH (Herb. Kew).

Stirps pulcherrima, *G. atropurpureae* affinis sed jam foliorum forma et indumento, stipulis elongatis, lobis calycis longioribus etc. optime distincta; pedicelli calycesque argenteo-villosissimi et corolla atropurpurea aspectum magnificentum praebent.

4. **Němcia Dorrienii** n. sp.

Oxylobium Dorrienii Dom. in sched. herb. Kew.

Frutex rigidus, ramosissimus, ramis fere teretibus, juvenilibus appresse sericeo-puberulis, adultis omnino glabratis laevibusque; folia ternatim verticillata, rarius opposita, breviter petiolata, valde rigida, coriacea, profunde obcordato-cuneata, emarginatura interdum breviter mucronatula, lobis obtusis, lateribus fere rectis, basi obtusiuscula, 1—1.5 cm longa et 0.5—0.8 cm antice lata, marginibus manifeste revoluta, supra glaberrima, lutescenti-viridia et fere laevia, enervia, i. e. sub lente tantum densissime subtiliter punctulato-reticulata, subtu indumento brevi cano appresso vestita; flores ad ramorum ramulorumque apices capitulati, raro quoque in axillo supremo fasciculati; capitula pernumerosa, densa, globosa, sessilia, foliorum verticillo haud mutato fulcrata, diametro circa 1.5—2 cm metientia; bractea e parvae, calyce saltem duplo breviores, orbiculari-ovatae, cuspidatae vel interdum tridentatae, extus rufo-villosae, intus glabrae, diu persistentes; flores brevissime pedicellati vel fere sessiles; calyx campanulatus, circa 7 mm longus, dense sericeo-villosus, tubo argenteo, lobis rufis; calycis lobi ovato-lanceolati, acuti, tubum adaequantes vel eo paulo longiores; vexillum circa 8 mm longum, ochraceo-luteum, tantum basi ad unguem purpureo-coloratum; alae oblongae, luteae; carina tota atroviolacea; ovarium brevissime stipitatum, sericeo-villosum, semper 4-ovulatum.

W. A.: Bridgetown to Kojonup and Slab Hut Gulley, leg. Capt. A. A. DORRIEN-SMITH (herb. Kew).

Species distinctissima, ob flores in capitula terminalia congestos cum *G. retusa* et *G. virgata* comparanda, sed sat superque diversa.

5. **Němcia coriacea** n. comb.

Chorizema coriaceum Sm. in Trans. Lim. Soc. IX. 254 (1838).

Podolobium ? coriaceum DC. Prodr. II. 103 (1825).

Oxylobium ovalifolium MEISSN. in Pl. Preiss. I. 28 (1844—45).

Callistachys tetragona TURCZ. in Bull. Soc. Nat. Mosc. XXVI. I. 249 (1853).

Oxylobium retusum R. BR. in Bot. Reg. t. 913 (1825), BENTH. Fl. Austr. II. 22 (1864), F. v. MUELL. First Census 33 (1882), Sec. Census 57 (1883), DIELS in Engl. Bot. Jahrb. XXXV. 224 (1904).

Callistachys coriacea O. KTZE. Rev. Gen. Pl. I. 168. (1891).

W. A. — Besides the var. *typicum* (cf. descript. apud BENTHAM) b) var. *minor* (BENTH. l. c. II. 22 sub *Oxyl. retuso*).

W. A.: Warrunup Hill, Stirling Range, leg. Capt. A. A. DORRIEN-SMITH.

6. **Němcia retusa** n. comb.

Gastrolobium retusum LINDL. Bot. Reg. t. 1647 (1834).

Oxylobium virgatum Hort. Kew. ex BENTH. Fl. Austr. II. 22 (1864), F. v. MUELL. First Cens. 33 (1882), Sec. Census 57 (1883).

Callistachys retusa O. KTZE. Rev. Gen. Pl. I. 168 (1891).

Habitat in Australia occidentali.

7. **Němcia reticulata** n. comb.

Oxylobium reticulatum MEISSN. in Pl. Preiss. 29 (1844—45), BENTH. Fl. Austr. II. 23 (1864), F. v. MUELL. First Census 33 (1882). Sec. Census 57 (1889).

Callistachys reticulata O. KTZE. Rev. Gen. Pl. I. 168. (1891).

Habitat in Australia occidentali.

Besides the typical form there is a variety b) var. **axillaris** (= *Gastrolobium axillare* MEISSN. in Bot. Zeit. XIII. 29. (1855), *Oxylobium reticulatum* var. *gracile* BENTH. l. c. 23).

8. **Němcia capitata** n. comb.

Oxylobium capitatum BENTH. in Hueg. Enum. 28 (1837), F. V. MUELL. First Census 33 (1882), Sec. Census 57 (1889).

Oxylobium nervosum MEISSN. in Bot. Zeit. XIII. 12 (1855).

Callistachys oxylobioides MEISSN. in Pl. Preiss. I. 27 (1844—45).

Callistachys capitata O. KTZE. Rev. Gen. Pl. 168 (1891).

Habitat in Australia occidentali.

9. **Němcia cuneata** n. comb.

Oxylobium cuneatum BENTH. in Lindl. Swan Riv. App. 12 (1839), Fl. Austr. II. 23 (1864), F. v. MUELL. First Census 33 (1882), Sec. Census 57 (1889).

Callistachys cuneata O. KTZE. Rev. Gen. Pl. I. 168 (1891).

Habitat in Australia occidentali.

Variat:

a) var. **typica** (cf. descriptionem apud BENTHAM l. c.).

b) var. **Drummondii** n. comb.

Oxylobium Drummondii MEISSN. in Pl. Preiss. I. 30 (1844—45).

Oxylobium cuneatum var. *emarginatum* BENTH. Fl. Austr. II. 24 (1864).

c) var. **cuneifolia** n. comb.

Oxylobium cuneatum var. *cuneifolium* BENTH. Fl. II. Austr. 24 (1864).

d) var. **obovata** n. comb.

Oxylobium obovatum BENTH. in Lindl. Swan Riv. App. 12 (1839), MEISSN. in Pl. Preiss. I. 29 (1844—45).

Oxylobium cuneatum var. *obovatum* BENTH. Fl. Austr. II. 24 (1864).

e) var. **dilatata** n. comb.

Oxylobium dilatatum BENTH. in Lindl. Swan Riv. App. 12 (1839), MEISSN. in Pl. Preiss. I. 29 (1844—45).

Oxylobium cuneatum var. *dilatatum* BENTH. Fl. Austr. II. 24 (1864).

10. **Němcia acuta** n. comb.

Oxylobium acutum BENTH. Fl. Austr. II. 24 (1864), F. v. MUELL. First Census 33 (1882), Sec. Census 57 (1889), DIELS in Engl. Bot. Jahrb. XXXV. 225 (1904).

Gastrolobium acutum BENTH. in Lindl. Swan Riv. App. 14 (1839).

Callistachys acuta O. KTZE. Rev. Gen. Pl. I. 168 (1891).

Habitat in Australia occidentali.

Whether the following two species with not strophiolate seeds belong to the genus *Němcia* is yet to be further investigated.

11. ? ***Němcia parviflora*** n. comb.

Oxylobium parviflorum BENTH. in Lindl. Swan Riv. App. 12 (1839), Fl. Austr. II. 24 (1864), F. v. MUELL. First Census 33 (1882), Sec. Census 57 (1889.)

Callistachys parviflora O. KTZE. Rev. Gen. Pl. I. 168 (1891).

Habitat Australia occidentali.

12. ? ***Němcia heterophylla*** n. comb.

Chorizema heterophylla TURCZ. in Bull. Soc. Nat. Mosc. XXVI. I. 255 (1853).

Oxylobium (?) *heterophyllum* BENTH. Fl. Austr. II. 25 (1864). F. v. MUELL. First Census 33 (1882) and Sec. Census 57 (1889) (without?).

Callistachys heterophylla O. KTZE. Rev. Gen. Pl. I. 168. (1891).

Habitat in Australia occidentali.