Taxonomic status of the roses (*Rosa*) described by S.G. Dimitrov from Bulgaria

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The original herbarium vouchers for six species of *Rosa* (Rosaceae) described by S. G. Dimitrov from Bulgaria are taxonomically evaluated. Two species (*R. balcanica*, *R. orphei*) are considered hybrids, four other names (*R. bulgarica*, *R. parilica*, *R. pontica* and *R. rhodopaea*) are taxonomic synonyms of widespread taxa.

Key words: Rosa, Rosaceae, nomenclature, taxonomy

The genus *Rosa* is represented in Bulgaria by a dozen or so species, several of them members of the taxonomically difficult section Caninae. The species are very variable, hybridizing freely so that their distinction is often difficult. Bulgarian herbarium material is rather scanty and mainly collected at the beginning of the last century. In the early sixties the genus Rosa in Bulgaria was studied by S. G. Dimitrov who botanized mainly in the central part of the Rhodopi Mountains in southern Bulgaria. Dimitrov (1966) published six new species, all, in his opinion, endemic to Bulgaria. He based his conclusions exclusively on his own collections deposited at the place of his employment, the Plovdiv Agricultural University, designated here by the acronym PAU. Later (Dimitrov 1973) he included all these species in the account of Rosa prepared by him for the Flora of PR Bulgaria. With the exception of R. parilica Dimitrov, which was reduced to synonymy by Zieliński (1984), the taxonomic status of Dimitrov's species has never been evaluated.

Rosa balcanica Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv) 15: 50. 1966. — "Habitat in locis lapidosis apertis montium in silvis fagetis abiebus albis mixtis adeorum margines superiores 1500–1600 m. s. m.; in declivi austro-orientali juxta Kozyata stena". — Holotype: Po kamenisti mesta na Kozyata stena, Stara Planina. 21.VI.1961 (PAU 47193). Syntypes: Kozyata stena, Stara Planina, 25.VI.1961 (PAU 10015), 22.VI.1962 (PAU 10018–10025), 30.VI.1963 (PAU 10038).

After examining the material determined by Dimitrov as R. balcanica we found it to be a mixed gathering of plants belonging to three different hybrids. In each case R. pendulina L. (sect. Cinnamomeae) was one of the parent species. They are R. pendulina $\times R$. villosa L. (holo-

type and syntypes as indicated in preceding text), R. pendulina \times R. canina L. (PAU 10028–10032 and 10017, coll. 30.VI.1963) and R. pendulina \times R. dumalis Bechst. (PAU 10043–10046, coll. 30.VI.1963). The diagnosis and published illustration (Dimitrov 1966: fig. 1) concern only the hybrid R. pendulina \times R. villosa, represented by a morphotype with entire sepals and densely hairy leaflets. From *R. pendulina* (sect. *Cinnamomeae*) it can be distinguished by the stems armed with infrastipular prickles and by the acute, densely hairy, more or less glandular leaflets; from R. villosa (sect. Caninae) it can be separated by the entire sepals, longer pedicels, solitary flowers and acutely serrate leaflets. Dimitrov placed his species in sect. Cinnamomeae and compared it with R. acicularis Lindl. and R. majalis Herrm. (as R. cinnamomea L.).

Rosa orphei Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv) 15: 53. 1966. — "Habitat in fruticetis ad austrum versus a pag. Sivino et prope viam inter opp. Smolyan-pag. Borino (Katrandjidere)-montes Rhodopi". — Holotype: Po shoseto na s. Borino-Smolyansko, 27.VI.1960 (PAU 47191). Syntypes: s. Sivino-Smolyansko, 28.VI.1964 (PAU 10980–10988) i gr. Smolyan-Borino, 27.VI.1961 (PAU 10978).

The species was included by Dimitrov in sect. Caninae, but in fact it is an inter-sectional hybrid between R. pendulina (sect. Cinnamomeae) and R. dumalis (sect. Caninae); it has more similarities with the latter parent species. Known as Rosa × salaevensis Crép., it is one of the most common hybrids formed by R. pendulina and often not segregated as distinct from R. dumalis, sometimes erroneously mistaken for R. glauca Pourret or even R. montana Chaix. Dimitrov compared his rose to R. dumalis and R. borissovae Chrshan. from Ukraine, but eventually stated: "Haec species aculeorum, florum atque fructum a sect. Caninae Crép. subsect. Vestitae; R. molli Smith et R. pomiferae Herm. proxima est." In our opinion this similarity is only superficial.

Rosa bulgarica Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv)

15: 55. 1966. — "Habitat in fruticetis Juniperetis in pinetis prope Chervenata stena, in parte orientali faucium prope pag. Trigrad (montes Rhodopi), 1500–1700 m. s. m.; in fruticetis prope viam alpinam jugi Tumba (mons Belassitza) et jugi Hambardere (mons Slavianka)". — Holotype: Okolo s. Dobrostan, 23.IX.1963 (PAU 47192). Syntypes: Chervenata stena, Asenovgradsko, 1.VII.1962 (PAU 10066–10077), 26.VIII.1962 (PAU 10080–10085), 15.VII.1963 (PAU 10087–10089); Okolo s. Dobrostan, Asenovgradsko, 23.IX.1963, PAU (10091, possible isotype); Krai skalite na sever ot rekata na s. Trigrad, 4.X.1963 (PAU 10092–10093); Ali-Botush (Slavianka), 5.VII.1964 (PAU 10094).

This species was included by Dimitrov in sect. *Caninae* and compared with *R. klukii* Besser (a little known enigmatic taxon described from Ukraine), *R. pulverulenta* M. Bieb. (as *R. glutinosa* Sm.) and *R. spinossisima* L. He suggested *R. bulgarica* was possibly the progeny of a hybrid between *R. pulverulenta* (as *R. glutinosa*) and some species of sect. *Pimpinellifoliae*.

In our opinion R. bulgarica represents merely a shade form of R. pulverulenta with eglandular stems.

Rosa parilica Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv) 15: 56. 1966. — "Habitat in locis calcareis lapidosisque 1200–2000 m. s. m. in monte Slavyanka (Parilski dol)". — Holotype: Ambar dere, Slavyanka Pl., 5.VII.1964 (PAU 10999; isotype PAU 11000). Syntypes: Same date and locality (PAU 10001–10003, 10005–10008, possible isotypes).

All material of *R. parilica* originated from a single gathering, with identical date and locality. The species was discussed in some detail by Zieliński (1984). According to his former and our present opinion, all specimens of *R. parilica* belong in *R. heckeliana* Tratt. (Trattinick 1823).

Rosa pontica Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv) 15: 58. 1966. — "Habitat in regionibus inferioribus montium, in dumetis pratisque. Raro. In parte boreali opp. Karlovo, in pag. Banya (Burgas), pag. Radovtzi (Gabrovo), opp. Kostenetz, prope opp. Sofia in parte australi viae inter oppida Sofia-Plovdiv prope Ivailovgrad et Krumovgrad". — Lectotype (designated here): s. Banya, Burgasko, 15.VII.1961 (PAU 10090). Syntypes: s. Banya, Burgasko, 15.VII.1961 (PAU 10091—

10092); m. Krumovgrad i Ivailovgrad, 28.V.1963 (PAU 11103–11004), 7.VII.1961 (PAU 11094–11095); Radovtzi, Burgasko, undated collection (PAU 11080); Trigrad, Smolyansko, 4.X.1963 (PAU 11106); Krai Sofia, 6.VII.1961 (PAU 10093); Krai Ivailovgrad, 28.V.1963 (PAU 11098–11099); Krai Karlovo, 7.X.1962 (PAU 10096–10097, 11100–11102).

All specimens named by Dimitrov as *R. pontica* in fact represent *R. turcica* Rouy, a very distinct species rather common in the Balkan Peninsula and SW Asia, easily distinguished from related taxa by its small, more or less rounded leaflets, white petals, glabrous styles and caducous sepals.

Dimitrov also recognized 'R. turcica Rouy', however, all the collections thus named by him included small-leaved forms of R. pulverulenta, which superficially resembles R. turcica in general appearance. It differs by the more or less hairy styles, usually pale-pink flowers and more persistent sepals. Such forms of R. pulverulenta were used by Dimitrov in the preparation of description and drawing of 'R. turcica' in his treatment for Flora of Bulgaria (Dimitrov 1973).

The herbarium specimen (PAU 47189) indicated by Dimitrov as the holotype for *R. pontica* originates from Slavianka, a place not mentioned for the species's distribution in the original publication. It is possible Dimitrov altered his choice at a later stage and forgot to correct his initial designation. We have thus selected one of the syntypes (PAU 10090) as the lectotype.

Rosa rhodopaea Dimitrov

Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Plovdiv) 15: 59. 1966. — "Habitat ad rupes ad boream versus a faucibus pag. Trigrad (montes Rhodopi)". — Holotype: Pokrai skalite iztochno ot Zhdreloto, severno ot Trigrad—Smoliansko, 5.VII.1963 (PAU 47190). Syntypes: s. Trigrad, Smoliansko, 5.VII.1963 (PAU 10086, 11152–11154), VII. 1963 (PAU 11155–11156), 27.VI.1964 (PAU 11161–11164, 11167–11168), 28.VI.1964, (PAU 11157–11160, 11169, 11171–11177).

In our opinion all material belongs to *R. pulverulenta* (sect. *Caninae*), but differs from the typical form of this species in having stems with uniform prickles. Dimitrov suggested that his 'new species' was possibly a plant of hybrid origin with the parent taxa being *R. pulverulenta* (*R. glutinosa* Sm.) and *R. micrantha* Sm.

References

Dimitrov, S. G. 1966: Novi shipki (Rosa L.) ot florata na Bulgaria. — Nauchni Trudove Selskost. Inst. 'Vasil Kolarov' (Ploydiv) 15: 49–61.

Dimitrov, S. G. 1973: *Rosa* L. — In: Jordanov, D. (ed.), *Flora* na Narodna Republika Bulgaria 5: 114–170. Izdatelstvo na Bulgarskata Akademija na Naukite, Sofia.

Trattinick, L. 1823: Rosacearum Monographia 2. — Vindobonae.

Zieliński, J. 1984: Rosa rubiginosa L. and R. heckeliana Tratt. in Bulgaria. — Fragm. Flor. Geobot. 30(3): 207– 211.