

Three new species of *Oenothera* from the Nordic countries. Flora Nordica Notes 32

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In a revision of the nearly 3000 specimens of *Oenothera* in the 21 Nordic herbaria, a total of 46 species and 16 supposed hybrids were identified. From the 46 species, 23 were collected from cultivation in gardens and 23 were collected in the field. The commonest (with over 100 sheets) were: *O. biennis* (over 1000 sheets), *O. rubricaulis*, *O. glazioviana*, *O. depressa* and *O. ammophila* (over 100 specimens mainly from Denmark). Two new species, *O. scandinavica* and *O. rubricauloides*, are described and the previously published name *O. wratislaviensis* is validated.

Key words: Denmark, Finland, new species, Norway, *Oenothera*, revision, Sweden, taxonomy

Introduction

At the suggestion of the Bergius Foundation Flora Nordica, the author carried out in the years 1998–2005 a revision of the *Oenothera* specimens in the following herbaria: Denmark: AAU and C; Norway: BG, KMN, O, TRH; Sweden: GB, LD, NORRKÖPING, OHN, S, SBT, UME, UPS, VI; Finland: H, KUO, OULU, TUR, TURA, VOA. Moreover, the list of species was completed with the results of revisions made earlier by the present author in 1962–63 (LD), 1963 (S, TUR, UPS), 1966 (H), 1967 (O) and 1968 (GB). The herbarium abbreviations follow *Index Herbariorum* I, 1990.

In August 1998, thanks to the help of Prof. Dr. Sven Snogerup, Lund, a field-trip was organized to study the distribution of *Oenothera* in southernmost Sweden.

Results

Apart from supposed hybrids and unidentified specimens, in the Nordic countries the following numbers of species were found: Denmark: 21 (639 herbarium specimens); Norway: 19 (322), Sweden: 40 (1573), Finland: 22 (311). From the total number of 46 species, 23 were cultivated in gardens and the rest were collected in the field.

Of the 23 species growing in the wild, the following were the commonest (over 100 sheets): *O. biennis* 1367 sheets, *O. rubricaulis* 469, *O. glazioviana* 270, *O. depressa* 160 and *O. ammophila* 110. The following five species were represented by 50–90 sheets: *O. canovirens* 85, *O. fallax* 61, *O. perangusta* 60, *O. casimiri* 60, and *O. scandinavica* 56. The following species were very rare: *O. deflexa* and *O. wratislaviensis*, both represented by two sheets, and *O. cambrica*, *O.*

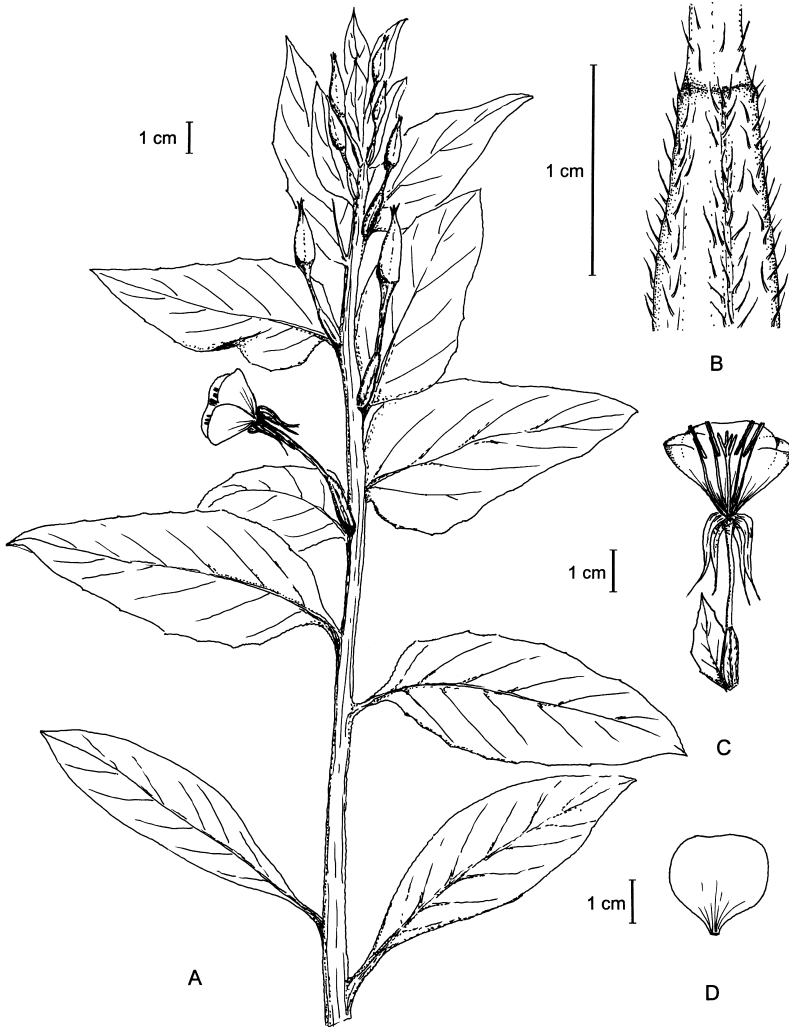


Fig. 1. *Oenothera scandinavica* (from the specimen: *Oenothera strigosa*, Agnesberg vid kvarnen, 31.VII.1941 Harald Fries, S — *Plantae Scandinaviae*; drawn by Dr. Andrzej Pasierbiński, Katowice). — **A:** Upper part of plant. — **B:** Upper part of ovary passing into lower part of hypanthium. — **C:** Flower. — **D:** Petal.

oakesiana, *O. victorini*, *O. wienii* and *O. villosa*, all represented by a single sheet.

Two new species, perhaps of hybrid origin, are described here, viz. *O. scandinavica* (= *O. biennis* × *O. depressa*) (Fig. 1) and *O. rubricauloides* (= *O. rubricaulis* × *O. biennis*) (Fig. 2). They were distinguished on the basis of the morphological characters only, no genetical analyses were made. The name *O. wratislaviensis* is validated by citing a holotype.

***Oenothera scandinavica* Rostański, sp. nova** (Fig. 1)

SYNONYM: *Oenothera depressa* Greene f. *latibracteata*

Rostański, *Fragm. Flor. Geobot.* 11: 510. 1965.

Planta bracteis inferioribus ovatis vel ovato-lanceolatis subamplexicaulibus, lata basi sedentibus.

HOLOTYPE: Sweden. *Planta a Cl. F.H. Ander die 28 .VIII. 1924 in Scania (Sueciae) prope stationem viae ferreae Klogerup collecta* (LD).

DISTRIBUTION: Northern Europe: Norway (15 localities), Sweden (29), Finland (12).

SELECTED LOCALITIES (paratypes): **Norway.** Vest Agder, Storo, 22.VIII.1927 *J. Holmboe* (O); Hordaland, Hartveit I Haus, 14.VIII.1928 *Olaf Hanssen* (BG); Oslo, Storo ved Grefsen, VIII.1934 *Jens. Z. Magnus* (O); Telemark, Possgrunn, 23.IX.1964 *Tore Ouren* (O). **Sweden.** Skåne, Klågerups järnvägsstation, 28.VIII.1924 *F.H. Ander* (LD); Småland, (Klm), [Högsby], Berga, 29.VI.1903 *Alf Stijenspetz* (OHN);

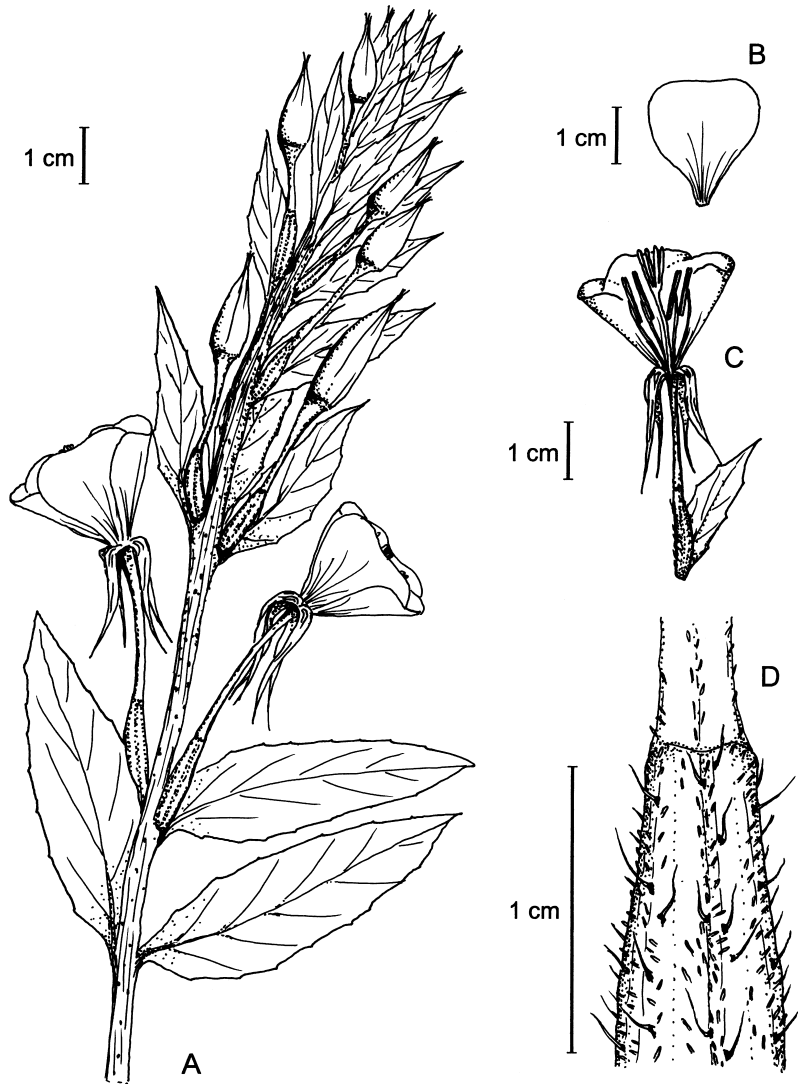


Fig. 2. *Oenothera rubricauloides* (from holotype; drawn by Dr. Andrzej Pasierbiński, Katowice). — **A:** Inflorescence. — **B:** Petal. — **C:** Flower. — **D:** Upper part of ovary passing into lower part of hypanthium.

Småland (Sml), Bergunda, Råppe, 6.IX.1927 *S. Carlsson* (OHN); Upland, Taecka, Udden, IX.1884 *H. Kugelberg* (S); Scania, Kristianstad, 14.VIII.1945 *Th. Lange* (LD); Öland, Raeppe, 6.IX.1927 *Sven Karlsson* (OHN); Västergötland, Noedinge socken, Bohusoptipp, 31.VIII.2002 *A. Svenson* (S); Göteborg, Kviberg, 26.IX.1945 *C. Blom* (S); Västmanland, Karbenning, 17.VII.1963 *Eric Almquist* (S). **Finland.** Nylandia, Helsinki, 19.VII.1926 *A. Cajander* (H); Ostrobothnia ouluensis, Oulu, Lyötty, 25.VII.1934 *Erkki Marttila* (OULU); Nylandia, Tenhola, 24.VIII.1939 *Hans Luther* (H); Karelia australis, Hamina, 28.VIII.1949 *Anja Mänttari* (H); Tavastia australis, Janakkala, Turenki, 19.VII.1977 *I. Mäkinen* (H); Nylandia, Hanko, Sandö, 11.VIII.1993 *T. Lahtonen* (TMP).

***Oenothera rubricauloides* Rostański, sp. nova** (Fig. 2)

SYNONYM: *Oenothera rubricaulis* Klebahn var. *longistylis* Gutte & Rostański, Ber. Arbeitsgemeinschaft. saechs. Bot. NF 11: 187. 1981. Type: WRSL.

Ab Oenotherae rubricauli differt floribus majoribus (petalis 20–28 mm longis), hypanthiis longioribus (25–35 mm longis), stylo saepe stigmatis supra antheribus positus.

HOLOTYPE: Sweden. Planta a Cl. Ulf Malmgren in Sweden, Stockholm, Kungsholmen, Hornbergs Strand, die

4.IX.1999 *collecta*. (S). This specimen is registered in the database of the Nordic Herbarium at the Swedish Museum of Natural History Stockholm as No. N-245-11.

DISTRIBUTION: Northern Europe, Germany.

SELECTED LOCALITIES (paratypes): **Denmark**. Sønderjylland. Bov, Kiskelund, 24.VII.2000 *Per Hartwig* (C); Komm. Neksoe, Rude, 12.VII.2002 *Sven Snogerup* (C). **Norway**. Oslo, Ekeberg, 18.VI. 2002 *Jan Wesenberg* (O); Vestfold, Tjøme, Treidene, 5.VII.2002 *Trond Grøstad* (O). **Sweden**. Göteborg, Kviberg, 26.IX.1945 *C. Blom* (GB); Uppland, Kungsholmen, Hornsbergs Strand, 4.IX.1999 *Ulf Malmgren* (S); Värmland, (Nodre) Ullerud, Dejefors, 15.VII.1893 *B. Billman* (LD); Värmland, Grava, Botorp, 11.VIII.1942 *F. Hård av Segerstad* (GB). **Finland**. Regio aboensis, Turku, VIII.1886 *Nestor Alchan* (TUR); Ostrobothnia media, Vaasa, Vasklot, 13.VII.1946 & 10.VIII.1946 *Martin Malberg* (VOA); Nylandia, Hanko, 18.VII.1997 *Hannu Kämäräinen* (H).

Oenothera wratislaviensis Rostański *ex* Rostański, *sp. nova*

BASED ON: *Oenothera wratislaviensis* Rostański, *Fragm. Flor. Geobot.* 9: 510. 1965 (with description in Latin).

HOLOTYPE: *Planta Wratislaviae (Silesia Inferior) loco*

inculto prope viam Piękna et viam ferream in herbosis Solidaginis serotinae die 9.VII.1959 a me collecta (WRSL).

PARATYPES: *Plantae e seminibus loco classico collectis in Horto Botanico Wratislaviensi deductae et diebus 1.VII.1961 et 17.VII.1962 a me collectae* (WRSL).

DISTRIBUTION: Poland, Belgium, casual in northern Europe.

LOCALITIES: **Sweden**. Halland, Snöstorp, Gustavsfält, 19.VII. 2005 *P.-J. Wallén* (S). **Finland**. Nylandia, Hanko, Täktom, 14.VII.1954 *U. Laine & Y. Mäkinen* (TUR).

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