Parmelia Ach. s. str. in the southern Baltic region

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Summary

The distinguishing morphological and chemical characters of nine species of Parmelia A. Br. s.str. occurring in the southern Baltic region, namely, P. bernardii Dackl et al., P. erinacearia Feuer & T. Thell., P. fraudans (Nyl.) Nyl., P. epiphylla L. A. (including var. discors, Discors L.) Sklovsky & v. Beekh., P. pinastri-kunzi Caraglia & v. Beekh., P. saxatilis (L.) A. Br., P. serrana A. Ces. ex A. Ces. & F. H. Wigg., P. submontana Nyl. ex Hale and P. sulcata Taylor, are presented. Four of the species are cryptic or semi-cryptic, being recent segregates from P. saxatilis and P. sulcata based primarily on evidence derived from molecular analysis. P. epiphylla was formerly believed to be chemically distinct from P. saxatilis on the presence of barrenoic acid, but recently this has been reported in both species. Furthermore, three chemotypes of P. saxatilis have been found by TLC in solvents A, C, and E. Thallus isidiate or without vegetative propagules, Thallus shiny or dull, most parts without pruina, saxicolous or corticolous. Lobes 2–4 mm wide; thallus usually pale brown or grey. Lobe margins not down-rolled; rhizines simple or squarrose. P. epiphylla is characterized by presence of lobaric acid. P. saxatilis and P. sulcata are characterized by absence of lobaric acid, but recently this has been reported in both species.

Isidiate species

Richterella epiphylla Feuer & T. Thell.
Key characters: pruinose, often lobiuate, isidia flattened, mainly in central parts.

Parmelia saxatilis (L.) Ach.
Key characters: reddish margin, isidia blackish at tips.

Parmelia submontana (Nyl.) Skult.
Key characters: dome shaped lobes, isidia-like soredia, and, in fact, closer related with isidate species

Parmelia epiphylla (L.) Ach. s. str. occurring in the southern Baltic region, namely, P. bernardii Dackl et al., P. erinacearia Feuer & T. Thell., P. fraudans (Nyl.) Nyl., P. epiphylla L. A. (including var. discors, Discors L.) Sklovsky & v. Beekh., P. pinastri-kunzi Caraglia & v. Beekh., P. saxatilis (L.) A. Br., P. serrana A. Ces. ex A. Ces. & F. H. Wigg., P. submontana Nyl. ex Hale and P. sulcata Taylor, are presented. Four of the species are cryptic or semi-cryptic, being recent segregates from P. saxatilis and P. sulcata based primarily on evidence derived from molecular analysis. P. epiphylla was formerly believed to be chemically distinct from P. saxatilis on the presence of barrenoic acid, but recently this has been reported in both species. Furthermore, three chemotypes of P. saxatilis have been found by TLC in solvents A, C, and E. Thallus isidiate or without vegetative propagules, Thallus shiny or dull, most parts without pruina, saxicolous or corticolous. Lobes 2–4 mm wide; thallus usually pale brown or grey. Lobe margins not down-rolled; rhizines simple or squarrose. P. epiphylla is characterized by presence of lobaric acid. P. saxatilis and P. sulcata are characterized by absence of lobaric acid, but recently this has been reported in both species.

Key to southern Baltic Parmelia-species

1 Thallus sorediate
   2 Thallus isidiate or without vegetative propagules
   3 Thallus shiny, laminal
   4 Soredia released from fissures
   5 Lobes 2–4 mm wide; thallus usually pale brown or grey
   6 Lobes usually less than 1 mm wide; thallus usually blackish

2 Thallus isidiate
   3 Thallus shiny, laminal
   4 Soredia released from fissures
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3 Thallus isidiate
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Sorediate species

Parmelia barrenoae Dackl, M. Nöhr
Key characters: Similar to P. aureoalascens but simple to furcate thallus, soredia develop in cracks

Parmelia fraudans (Nyl.) Nyl.
Key characters: yellow soredia

Parmelia submontana (Nyl.) Skult.
Key characters: dome shaped lobes, isidia-like soredia, and, in fact, closer related with isidate species

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References


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