

Gonohymenia Steiner
(LICHINACEAE)

After various authors

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Thallus crustose, squamulose to lobed, delicately to coarsely squamulose and imbricate, pulvinate or umbilicatefoliosefruticose, often with differentiated marginal lobes, not rarely proliferating; layered or unlayered, \pm gelatinous when wet, tough, leathery or \pm rigid when dry, dark grayish or greenish black, matt, attached by aggregates of medullary hyphae. Photobiont Xanthocapsa.

Apothecia \pm immersed, single or in rounded groups, thallinocarpous, not readily seen without dissection; in final stage the hymenium may be segregated into small parts which become surrounded by excipular hyphae, giving the thallinocarp the spurious appearance of a thallus with grouped individual fruiting bodies; epithecium \pm strongly developed, algaecontaining, enclosing the disks in a layer or in the form of a single spot and passing over into the thallus. Hymenium with an entire to cracked epithecium containing algae. Paraphyses threadlike. Asci 8 to many spored. Spores hyaline, ellipsoid to spherical, simple, thinwalled.

Pycnospores ellipsoid. Mostly on rock, mainly in rather arid areas. Arctic to warmtemperate.

- 1. **Thallus granulose to squamulose, not umbilicate.2**
- 1. **Thallus foliose to fruticose, umbilicate.3**

2. Thallus minutely granulose, slightly lobed. Apothecia 0.30.5 mm diameter; spores 36 x 23 um. Apothecia immersed lseveral in plainly raised wartlike elevations of the thallus; disc punctiform, black. Spores subspherical to ellipsoid. Thallus minute to small, irregular, smooth to more commonly uneven, adnate to raised, rigid, black. On rocks. Great Lakes area (Minnesota).G. minnesotensis (Fink) ined. (syn. Forssellia minnesotensis; I don't know if the new combination in Gonohymenia is published yet)

2. Thallus squamulose, orbicular, lobed/effigurate. Apothecia to 0.3 mm diam.; spores 58 x 35 mm. Thallus to 3 mm wide; squamules 0.51 mm, attached by hyaline rhizines. Apothecia punctiform. On seepage rocks, Vermont.G. melanophylla

- 3. Thallus granularisidiate, with abundant fine isidia. Spores 8**

per ascus, 814 x 58 um. Thallus rosettes about 1 cm wide, often closely turflike crowded; lobes up to 3 mm wide, irregularly divided, the ends often shellform. Apothecia 0.4-1.2 mm. Pycnospores 34 x 11.5 um. On base containing rocks.G. nigritella (Lettau) Henssen

3. Thallus not isidiate. Spores to 1224 per ascus, 79 x 34um.

Thallus (3)8-15 mm wide; lobes leaflike flattened, 0.52 mm wide, ± strongly divided, often almost loculate, gray-black. With aggregated Xanthocapsa photobiont especially at the margins. Apothecia punctiform, peritheciallike, grouped on a projection 11.5 mm diameter, in form of a ± clearly sessile, often apotheciaform wartyrrough disc ("false apothecium" or "composite fruit"). On various rocks.G. cribellifera (Nyl.) Henssen

Literature

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