

Japewia Tonsb.
(LECANORALES)

After Tonsberg, Hawksworth & Coppins, and Thomson

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Thallus crustose, immersed to superficial, whitish, greenish, or brownish; sometimes sorediate. Photobiont chlorococcoid. Apothecia adnate, biatorine, pale to dark, \pm red-brown, marginate or immarginate, plane to conex or subglobose. True exciple present, pale within, red-brown at edge; hyphae with gelatinous covering. Hypothecium hyaline or pale. Epihymenium red-brown to brown. Paraphyses \pm separating in K, branched below and at least occasionally anastomosed, with gelatinous covering; apices slightly to distinctly thickened, with brown caps. Asci \pm Lecanora-type, the apex thickened, amyloid, with an internal apical beak and \pm wide apical cushion. Spores 8, simple, hyaline, ellipsoid, ovoid-ellipsoid or globose, with \pm thick walls (to 1.5-3 μ m, but only 0.7-1.5 μ m in one species not yet reported from N. America) and \pm with gelatinous epispore. Atranorin, lobaric acid, pigments, unknowns, or no substances. On bark, or on bryophytes in sheltered rock crevices. Temperate-boreal to arctic. Type species: J. tornoensis.

A segregate from Lecidea, characterized especially by the biatorine apothecia, ascus type, and \pm thick-walled spores with gelatinous epispore.

1. Thallus without soredia, absent to thin, membranaceous to granulose, olivaceous brown or olivaceous green, K-, P-, KC-, C-, I- (no substances). Apothecia common, to 0.6(-0.8) mm diam., adnate to constricted below; disk becoming strongly convex, reddish brown to brownish black, roughened, shining, immarginate. Exciple scarcely formed, outer part reddish brown, inner paler, radiate; epithecium reddish brown; hypothecium pale reddish or brownish or hyaline; hymenium 50-80 μ m (130-180 μ m according to Thomson, but he includes "the lower part grading into hypothecium, I+ blue", which is the subhymenium); upper part brown; paraphyses branching, anastomosing, conglutinate, tips dark brown and thickened to 6 μ m; asci broadly clavate, the apex thickened with an internal beak, Lecanora-type; spores 8, biserial, broadly ellipsoid, (15-)17-20(-24) x (8-)12-15 μ m, the wall to 2-3.5 μ m thick. On a variety of tree and shrub barks, and on mosses and humus, sometimes in sheltered rock crevices. Arctic to temperate, Alaska to northeastern U.S., south in the west to California.J. tornoensis

1. Thallus with soredia, green-brown to brown, \pm rimose; soralia discrete to \pm confluent, spotted brown-yellow, yellow to yellowish green internally. Apothecia rare, < 0.4 mm diam., chestnut brown; spores 11-20 x (8-)12-13(-14) μ m, the wall 1.5-3.0 μ m. Thallus endo- to epi-substratal in non-sorediate parts, indeterminate, forming \pm irregular patches between other lichens, to 1-2 cm diam., sometimes confluent, mostly areolate, sometimes partly continuous and then often secondarily cracked into angular segments. Prothallus usually indistinct. Areoles indistinct or absent, greenish (shade) to brown (sun), to 0.15 mm diam. Soralia bursting up through substrate; soredia to 30 μ m diam., sometimes aggregated. Thallus UV \pm bluish white, containing unidentified pigments ("subaurifera unknowns") and \pm lobaric acid. On acidic bark of deciduous or coniferous trees, occasionally on wood of pines, usually in moderately shaded

and somewhat humid habitats, e.g., river banks and north-facing slopes. British Columbia, Washington. J. subaurifera

ADD:

J. carrollii

Literature

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