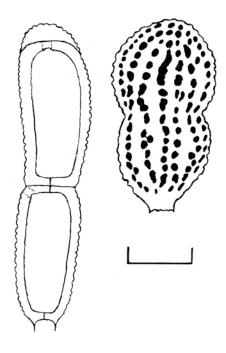
PUCCINIA CANADENSIS

Teliospores in optical section and surface view. Scale = 10μ



Puccinia canadensis Arth., Bull. Torrey Bot. Club 31: 2. 1904.

PYCNIA, AECIA and UREDINIA lacking. TELIA amphigenous and petiicolous, pulverulent, chestnut brown. TELIOSPORES (excluding rare 1-celled or teratological spores) $25-54(-58) \times 11-17.5\mu$, (slightly to) moderately to strongly constricted at septum, cells variable in shape and occasionally separating; walls $1.0-2.2\mu$, light to dark yellow-brown, finely and generally striately verrucose, with warts ca. $0.2-0.4\mu$ high \times $0.4-1.0(-1.2)\mu$ diameter, circular to irregular and often partly fused into irregular longitudinal ridges; germ pores apical with subhyaline to yellow cap ca. $2-3.5\mu$ high, and septal with at most small cap; pedicels hyaline, usually cleanly deciduous.

HOST: Viola orbiculata Geyer ex Holzinger.

DISTRIBUTION: SW Alberta (fide Arthur loc. cit.), S British Columbia.

COLLECTIONS: B.C.: E. of Baldy Mtn., 51°27'N 120°03'W, 2040 m., 9 Aug. 1956, DAOM 54537 (Calder, Parmelee & Taylor 19902B); Glacier, 2 Sept. 1902, DAOM s.n. (Holway); Mt. Revelstoke, 1830 m., 23 July 1953, DAOM 44269 (Calder & Savile 10919); W. side Allison Pass, Manning Park, 1310 m., 8 Aug. 1953, DAOM 44265 (Calder & Savile 11564); Gibson Pass, Manning Park, 1340 m., 8 Sept. 1954, DAOM 45461 (Calder, Savile & Ferguson 15633).

NOTES: The type collection (not seen) is from Laggan (now Lake Louise village), and is apparently the only record from Alberta. The type locality is ca. 6 km. from the B.C. boundary and 85 km. from the

site at Glacier. One extralimital specimen is known to me: a sparse infection on small plants of *Viola orbiculata* at 1615 m. on the NE slope of Mt. Baker, Whatcom Co., Wash., 9 Sept. 1969, DAOM 128615 (Savile 5076). This rust is to be sought further south especially on the west slopes of the Cascades.

D.B.O. Savile