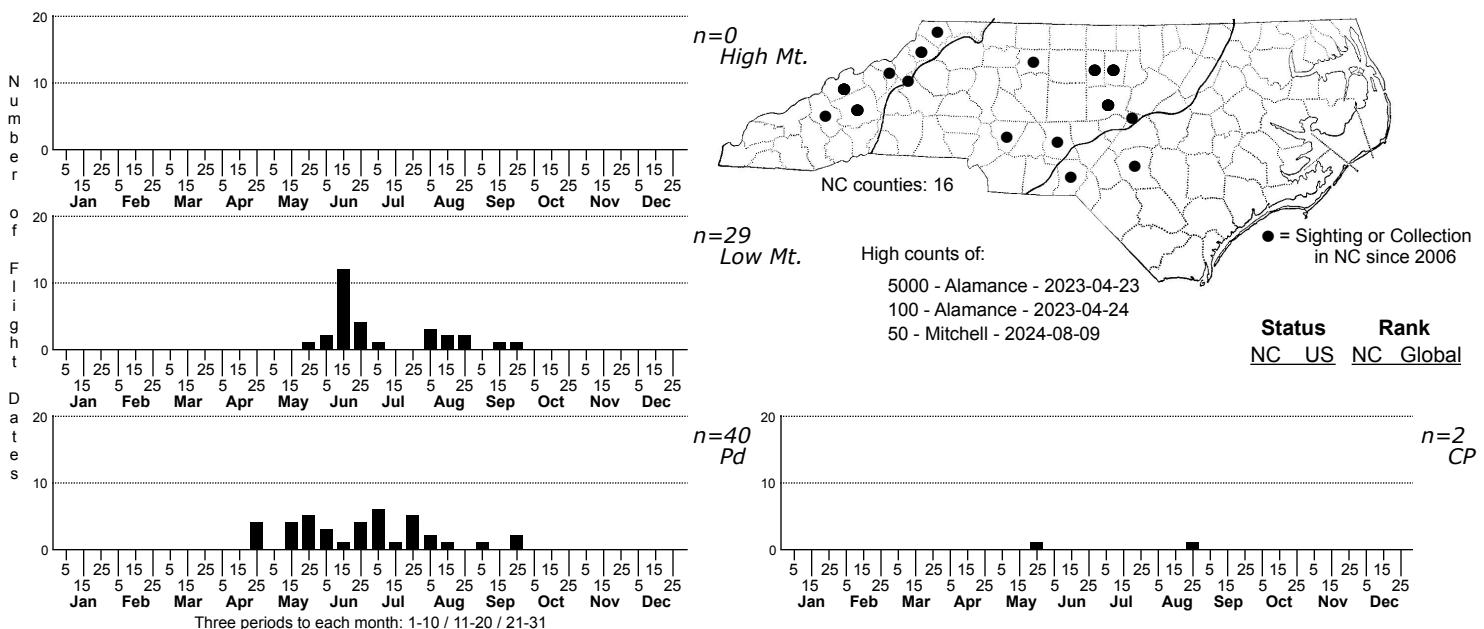


Petrophila canadensis Canadian Petrophila



FAMILY: Crambidae SUBFAMILY: Acentropinae TRIBE: Argyractini
TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Lavery (1973)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Lavery (1973)

ID COMMENTS: *Petrophila canadensis* is a member of the *Petrophila fulicalis* group as defined by Sexton (2021) and has rather complex wing patterning that is generally similar to that of other members of the group. The forewing has a conspicuous white median band that is often jagged. The white median band adjoins a broad, diffuse, brown antemedian band, which in turn is followed by a broad, whitish post-basal band that is margined basally by a relatively thin dark line. The very base of the wing is typically whitish, with varying levels of darker dusting. The white median band is margined apically by a thin brownish line. The line frequently forms the basal edge of a whitish elliptical loop (discal bar on Munroe, 1972) in the subcostal region. The loop is surrounded by darker pigmentation and often bisected, with the apical half orangish and the basal half white. One or two additional elliptical loops are occasionally present on the apical third of the wing. The apical third of the wing has a mixture of whitish and brown or orangish markings. These include a gradually narrowing, dark triangular mark that extends from the subapical region towards the tornus. It parallels similar white triangular marks of either side. Other conspicuous marks include an orangish terminal band that parallels the outer margin, and a similar orangish tornal bar or wedge that runs perpendicular to the terminal band. The two orangish bands are typically connected near the tornus to form an L-shaped mark. Varying levels of dark speckling are also present on the dorsal half of the wing. The patterning on the basal three-fifths of the hindwing matches that on the forewing. The apical half differs in having more conspicuous dark speckling that is mostly confined to the costal half of the wing, and a series of five subterminal black spots with lighter centers. A thin dark-brown or black capline is present over the eyespots that is variably expressed, and often broken or incomplete.

Petrophila canadensis is the only *Petrophila* species that has been documented in North Carolina as of 2024. *Petrophila fulicalis* and *P. bifascialis* are two related forms that have been found in eastern Tennessee and might be present in the western mountains. Sexton (2021) has distribution maps and information on how to distinguish between these three species.

DISTRIBUTION: *Petrophila canadensis* is found in eastern North America, including portions of southern Canada from southern Manitoba eastward to Nova Scotia and Prince Edward Island. In the US it occurs from Minnesota eastward across the Great Lakes region to the New England states, and southward and westward to Illinois, Indiana, Kentucky, central and eastern Tennessee, central Alabama, northern South Carolina, and North Carolina. This species is mostly found east of the Mississippi River and is generally absent from most or all of the southeastern Coastal Plain. As of 2024, all but one of our records are from lower-elevation sites in the Blue Ridge and rocky stream sites in the Piedmont. We have one Coastal Plain record near the interface with the eastern Piedmont.

FLIGHT COMMENT: The adults have been observed from April through September in different areas of the range, with a seasonal peak commonly in June and July. Local populations in North Carolina appear to be bivoltine. As of 2024, our records extend from late-April to late-September.

HABITAT: Local populations are found in and around streams and rivers, particularly those with rocky substrates and riffles.

FOOD: The larvae feed on algae and diatoms that coat the surfaces of submerged rocks (Lavery, 1973).

OBSERVATION METHODS: The adults are attracted to lights and the larvae can be found by inspecting the tops and lateral sides of rocks for cases in streams.

NATURAL HERITAGE PROGRAM RANKS: GNR[S2S3]

STATE PROTECTION:

COMMENTS: This species is unusual in having aquatic larvae that live in the riffle sections of fast-flowing streams. They can be locally abundant where the appropriate habitats are present.