

Ch. 60 - CHLOROCOMA HALOCHLORA (Meyrick)
(Gm./green) (Figs. 1094-1110)

O.D. = Meyrick 1888. Proc. Linn. Soc. N.S.W. (2)2: 878 (Iodis).
TYPE in BMNH / DET. by McQ. (1982).
A RECENT REF. is McF. 1979: 40 (dot 4); not identified in that paper.

● McF. LARVAL COLL. CODE-NO. = Gm.404.
STAGES PRSV. = 1-2, 5-6 (1969: in SAM).

LOCALITY: N. Flinders Range, S.AUSTRALIA.
HABITAT PHOTOS: H85-88 (only).

FOODPLANTS & PHENOLOGY
(in the Flinders Ranges)

LARVAE (25 Oct. and 2 Nov. 69) were beaten from Acacia rivalis (det. S.A. Herbarium), during a spring visit to the Flinders Ranges (a desert loc., ± 500 km. N. of Adelaide), in the company of Arturo and Peter Taverna. This same locality (36-37 km. E. of Copley) is described in more detail under Austroterpna paratorna (Ch.48). The halochlora larvae were easily obtained by beating and searching the acacias; they were found in large numbers (primarily in L4-L5, but also smaller), along with the less abundant paratorna larvae. [See also "F.N.(1)" under Euloxia fugitivaria (Ch.64), for a much better collecting technique than beating, used with equal success when hunting the halochlora larvae.] They readily switched to young phyllodes of A. pycnantha upon return to Blwd., and rapidly completed growth on this substitute, pupating quickly and emerging by late Nov. 69. Adult emergence hours were recorded for 1 ♂ (1730 hrs.) and 3 ♀♀ (1830, + 2000 and after 2300 hrs.). ADULTS of this brood probably fly about Nov. to early Dec. and there may be several generations in "good" years, no doubt depending upon local conditions and rainfall; activity presumed to be entirely nocturnal.

Several halochlora adults in the ANIC were coll. 30 April 1968 (IFC.), at 45 km. W. of Madura, W.AUST. (an arid locality on the south coast, ± 240 km. W. of the S.AUST. state border).

ADULT (1094-1101)

REMARKS: Quite unlike most other green geometrines (including Chlorocoma spp.) encountered in S.AUST., but should be compared with my Gm.168 (see McF. 1979: 36, dot 5), as yet unidentified, but probably a small relative of halochlora. Gm.168 is also (apparently) a moth of more arid localities, and may be more closely related to halochlora than to any of the other green Chlorocoma spp.; halochlora appears to stand somewhat apart from the others, and may warrant generic separation....

DESCRIPTION: LFW ♂ 10-11.5 mm. / ♀ 13.5-15 mm. The ♂ wing shapes (both FW and HW) are quite unlike any other S.AUST. green geometrine encountered during this study. The dorsal wing surfaces are also unique, due to a most distinctive soft satin sheen (shows well in some

of the r.p. photos of living specimens, 1097-99); there is a complete absence of mac. — not the faintest trace of a line or other markings in any of the 16 specimens studied. G.c. (all wings) uniformly a soft or pale, dull green, typical of what might be expected in the desert representative of a group having more vividly coloured members near the coast (in cooler/wetter localities). DFW costal margin very narrowly edged with deep yellow, which sometimes tapers and fades out before reaching the apex (variable). Fringe at apex of FW deep yellow, becoming paler yellow further down, and finally pale green at the anal angle and along inner margin. DHW fringe uniformly very pale yellow to pale green (paler than g.c. of the wing); all fringes shiny, but hardly contrasting with the wing surfaces, which also have a distinct sheen (slightly less so than the fringes). Abd. of ♀ pale gray-green dorsally, concol. with wings; sides and tip white (almost entirely white in ♂, because nearly totally hidden when at rest; see 1097-98). Legs: T1 leg dull purplish-tinged pink, with a green coxa; T2 leg deep pink-tinged, becoming more purplish on tarsus; T3 leg pale pink on femur and tarsus, but white predominates. Head pure deep brown on front, with or without an admixture of deep green scales; palpi dark pinkish-tipped; top of head pinkish-tinged dull white; collar pale gray-green, concol. with thx.; ant. shaft pinkish from base to tip on dor. surface. (The above based on 16 specimens.)

BEHAVIOUR: The ♂ r.p. is nearly closed planiform, quite unlike any "true" Chlorocoma known to this writer; there is usually a little HW exposure (FW inner margins not tightly closed along abd. dorsum). The ♀ r.p. is also nearly closed planiform, but often with slightly more HW exposure than in the ♂, probably due to the bulging abd. of fresh specimens. A ♂ observed settling was seen to perform a diminishing series of "lizard-like push-ups", involving the entire body but lacking any separate wing flaps.... again, unlike any other S.Aust. Chlorocoma (but see P. ocyptera). The moth in 1097 had just landed (ant. still out); the one in 1098 (also a ♂) was at total rest. Angle of FW costal margin to body axis, when at total rest on a flat surface: 50-38° (♂ & ♀); ± 45° is "typical".

EGG (1102)

Gm.404A — orig.♀ from Arkaroola Homestead, in the Flinders Ranges: 0.75-0.70 X 0.65-0.60 X 0.40-0.35 mm.

Colour changes not described; some empty shells preserved for the dry collection.

LARVA (1103-1107)

DESCRIPTION (L5): Body very firm; skin tough and shagreened. G.c. a dull olive-green. Many have irreg. dark brown spots or other small markings, much as descri-

bed in Ch.57; similar types of small, dark brown spots are also frequent on older phyllodes of the fp., wherever past feeding (or other mechanical injury) had occurred and then scarred over. All larvae seen had a most distinctive component in the colouration at the caudal end of the body, where the dull green g.c. ends at A6-A7; here it abruptly changes to dull yellowish, which then continues to the suranal plate (see 1107). This short yellow zone perfectly simulates the short, yellowish petiole of the fp. lf. (phyllode), further enhancing the already excellent crypsis. Head position at rest: MP3 / PF: 0006 / Max. length: 28-32 mm.

BEHAVIOUR (L5): Unlike most larvae of green geometrines, these can be induced to drop on silk if not too violently dislodged, but they will not let go readily, if the disturbance is only minor. Typical of most other geometrines, these larvae are extremely sluggish and cling with great tenacity. Truelegs somewhat more conspicuous at rest in these larvae (1107) than in the other Chlorocoma spp. depicted in this book.

PUPA (1108-1110)

Max. length: 12-15 mm. Integ. firm, tough and rugulose. General appearance rather plump but otherwise much like other Chlorocoma spp.; some have very little or only faint mac. on wing cases, thus appearing paler (1109, right); prominent mdd. line on abd. black (becoming dark brown in alcohol). G.c. pale pinkish-tan. At and just below tip of cremaster are 8 slender, recurved hooks; the 3 up either side are about one-third shorter than the apical pair and do not differ greatly in thickness; alignment relatively precise (not entangled), but the ends may curve in various directions. Capable of lively circular abdominal movement. COCOON not described.

DATA for Figs. 1094-1110 (Gm.404)

(all depicted, except the eggs in 1102, are from 36-37 km. E. of Copley)

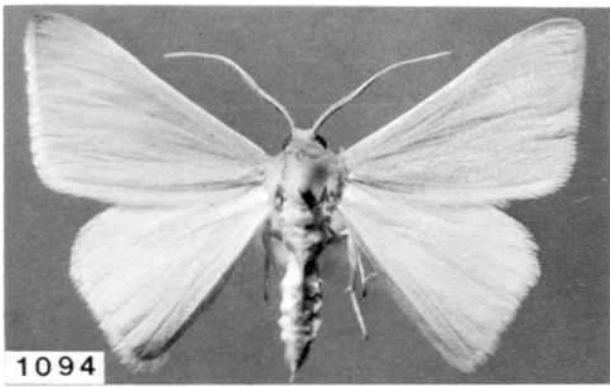
1094-1095: Dor. & ven. of same ♂ (LFW=11 mm.), H. Nov. 69. 1096: ♀ (LFW=14 mm.), H. Nov. 69. 1097-1098: Live ♂ r.p.; 1097 just landed (ant. still out) and 1098 at "total rest" (LFW=11.5 & 11 mm.); both H. Nov. 69. 1099-1101: Live ♀ r.p. (LFW=15 mm.), H. Nov. 69; note minimal amount of HW exposure and slight elevation of thx. above substrate. 1102: Live eggs on muslin (Gm.404A, orig.♀ from Arkaroola Homestead, N. Flinders Range), late Oct. 69. 1103-1107: 3 diff. L5, the first 2 not filled out (23 & 30 mm.); the last 3 filled out (30 mm.); photos made 26 Oct. 69, on Acacia rivalis. 1108-1110: Live pupae (12.5 & 13.5 mm.), photos made early Dec. 69.

B. & W. PHOTOS: Made 44 (used 17 herein).

NOTES WRITTEN: 2 pp. (L).

"What we call 'wildness' is a civilization other than our own."

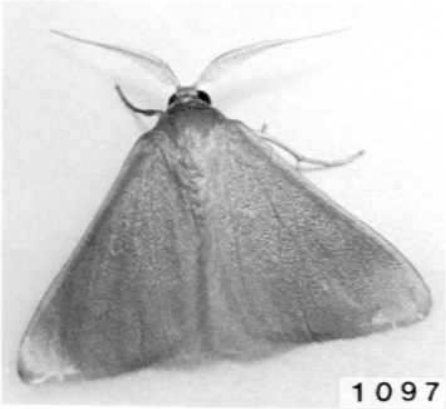
— H.D. Thoreau (Journal: 16 Feb. 1869)



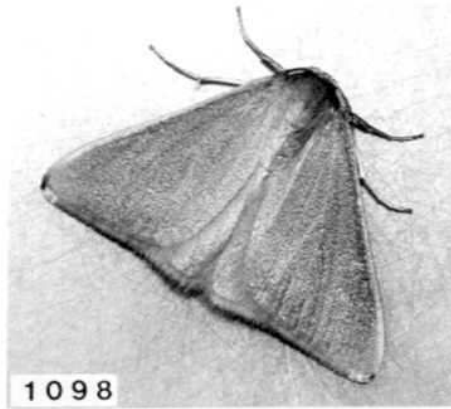
1094



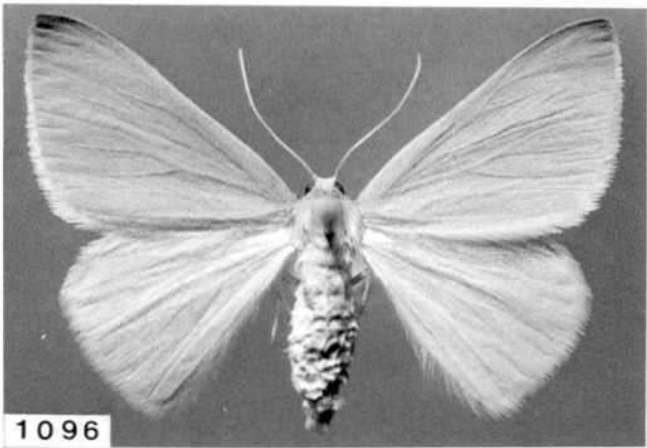
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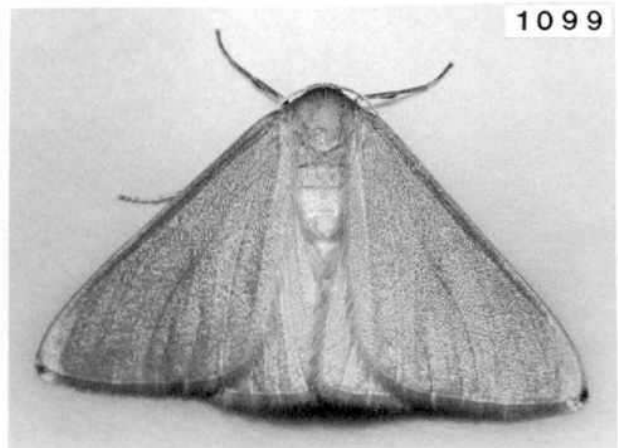
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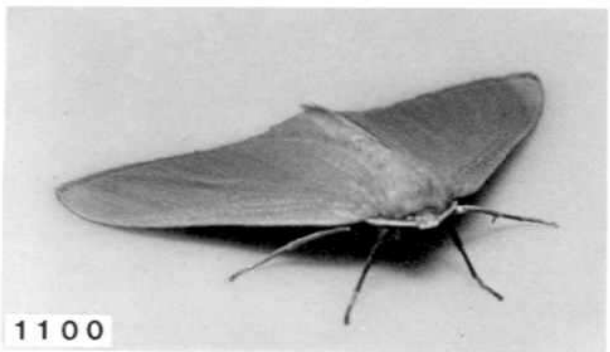
1098



1096



1099



1100



1101

