Insect Systematics & Evolution

Evidence for the dissolution of the *Calyptra minuticornis novaepommeraniae* (Strand) and *C. minuticornis minuticornis* (Guenée) sub-species distinction (Insecta: Lepidoptera: Erebidae)

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Supplementary material

Dissimilarity Matrix	Phylogenetic Analysis	Dissection number (M/F)	1	6	11	16	21	26	31
Cmin 001/Cmin 022	Taxon00	JS006/JS040	, ?1111	01011	10011	11100	01111	11110	?-
Cmin_002	Taxon01	JS035	1-111	01071	10011	11011	01101	1	
Cmin_003/Cmin_019	Taxon02	JS043/JMZ524	?1???	?????	20011	11011	01101	11110	11
Cmin_004/Cmin_020	Taxon03	JS042/JMZ525	?1???	?????	20011	11011	11101	11110	11
Cmin_005	Taxon04	JS039	1-11?	01011	10011	11101	01111	1	
Cmin_006	Taxon05	JS037	1-111	???11	20011	11101	01117	1	
Cmin_007/Cmin_016	Taxon06	JS030/JS031	111111	?1011	10011	11100	01111	11110	11
Cmin 008/Cmin 018	Taxon07	JS032/JS029	11111	01011	10011	11100	01117	11110	??
Cmin_009	Taxon08	JS041	1-111	01011	10011	11100	0111?	?	
Cmin_009	Taxon09	JMZ527	1-111	01011	10011	11000	0111?	1	
Cmin_011	Taxon10	JMZ526		01011	10011	11000	0111?	1	
Cmin_012	Taxon11	JS034	1-111	01012	10011	11001	0111?	1	
Cmin_012 Cmin_013	Taxon12	JS034	1-???					•	
-			1-111	01011	?0011	11011	0110?	1	
Cmin_014	Taxon13	USNM 42.319	?-???	?????	20011	11101	0111?	1	
Cmin_015/Cmin_055	Taxon14	USNM 42.317/NHM #21837	?????	?????	?0011	11101	0111?	11110	11
Cmin_025	Taxon15	Noct.9938	?-???	?????	?0011	11101	011??	1	
Cmin_026/Cmin_053	Taxon16	Noct.9939/NHM #21832	?????	?????	?0011	11011	0110?	11110	11
Cmin_027	Taxon17	Noct.9940	?-???	?????	?0011	11011	?110?	?	
Cmin_028	Taxon18	Noct.10061	?-???	?????	?0011	11011	1110?	1	
Cmin_029	Taxon19	Noct.10062	?-???	?????	?0011	11101	0111?	1	
Cmin_030/Cmin_023	Taxon20	Noct.10063/JS027	?1???	?????	?0011	11101	0111?	11110	?-
Cmin_031/Cmin_052	Taxon21	Noct.9917/NHM #21830	?????	?????	?0011	11100	0111?	11110	??
Cmin_032	Taxon22	Noct.10542	?-???	?????	?0011	11101	0111?	1	
Cmin_033	Taxon23	Noct.10543	?-???	?????	?0011	11101	0111?	1	
Cmin_034	Taxon24	Noct.10544	?-???	?????	?0011	11001	0111?	1	
Cmin_035	Taxon25	Noct.10545	?-???	?????	?0011	11001	0111?	1	
Cmin_036	Taxon26	Noct.10572	?-???	?????	?0011	11101	0111?	1	
Cmin_037	Taxon27	Noct.10573	?-???	?????	?0011	11101	0111?	1	
Cmin_038	Taxon28	Noct.10574	?-???	?????	?0011	11001	0111?	1	
Cmin_039	Taxon29	Noct.10575	?-???	?????	?0011	11101	0110?	1	
Cmin_040/Cmin_051	Taxon30	Noct.10576/NHM #21829	?????	?????	?0011	11101	0110?	11110	11
Cmin_041	Taxon31	NHM #21831	?-???	?????	?0011	11101	01111	1	
Cmin_042	Taxon32	NHM #21833	?-???	?????	?0011	11011	11101	1	
Cmin_043	Taxon33	NHM #21836	?-???	?????	?0011	11011	11101	1	
Cmin_044/Cmin_054	Taxon34	Noct. 9758/NHM #21835	?????	?????	?0011	11100	0110?	11110	11
Cmin_045	Taxon35	Noct.1538	?-???	?????	?0011	11100	0111?	1	
Cmin_046	Taxon36	Noct.1539	?-???	?????	?0011	11011	1110?	1	
Cmin_047	Taxon37	Noct.1540	?-???	?????	?0011	1110?	0111?	1	
Cmin_048	Taxon38	Noct.1541	?-???	?????	?0011	11101	0111?	1	
Cmin_049	Taxon39	Noct.1542	?-???	?????	???11	11010	0110?	1	
Cmin_050	Taxon40	Noct.1543	?-???	?????	?0011	11011	0110?	1	
Cmin_017	Taxon41	JS038	-1					-1110	11
Cmin_024	Taxon42	JS028	-1					-1110	?-
Oema_001	Taxon43	JMZ389/JMZ388	01???	000??	?0110	00?	2000?	12000	10
Cfas_001	Taxon44	Noct. 9911/JMZ330	01???	?????	?0012	201	2101?	10220	??
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Fig. S1. Data matrix.

Supplementary Text S1. Synopsis of characters and states used for the phylogenetic analysis.

Head

- 1. Male Antenna: Flagellomere shape. 0) bipectinate; 1) unidentata.
- 2. Female Antenna: Flagellomere shape. 0) bipectinate; 1) unidentata.
- 3. Proboscis: Tearing hooks in the apical region of the proboscis. 0) absent; 1) present.
- 4. Proboscis: Rasping spines occurring along the lateral and ventral margin of the proboscis. 0) absent; 1) present.
- 5. Proboscis: Apex of proboscis sclerotizatized forming a sharp point. 0) absent; 1) present.
- 6. Labial Palp: Size of first segment of the labial palp. 0) short, half as long as segment 2
- 7. Labial Palp: Size of second segment of the labial palp. 0) short, as long as segment 1; 1) longer than segment 1.
- 8. Labial Palp: Size of third segment of the labial palp. 0) short, thinner then segment 1.

Thorax

9. Prothoracic leg: Epiphysis occurring on tibia. 0) absent; 1) present.

10. Mesothoracic leg: One pair of spurs occurring on apical half of the tibia. 0) absent; 1) present.

11. Metathoracic leg: Two pairs of spurs occurring on apical half of the tibia. **0**) absent; **1**) present.

Male Abdomen

12. Genital capsule: Shape of the saccus. 1) v-shaped.

- 13. Genital capsule: Sclerotization of saccus. 0) not contiguous; 1) contiguous.
- 14. Genital capsule: Shape of sacculus. 1) Contiguous with costa.

15. Genital capsule: Shape of the apex of the sacculus. 0) entire; 1) forked; 2) long, thin, sharp point

16. Genital capsule: Process of the sacculus. 0) absent; 1) small, tooth-like with rounded point 2) rounded, lobe-like.

- 17. Genital capsule: Processi of juxta. 0) absent; 1) present.
- 18. Genital capsule: Processi of the juxta shape round. 0) absent; 1) present
- 19. Genital capsule: Size of processi (from middle of process). 0) higher than wide or subequal; 1) wider than high
- 20. Genital capsule: Size of juxa (including processi, using widest and highest part as reference). 0) higher than wide or subequal; 1) wider than high.
- 21. Genital capsule: Shape of the uncus. 0) broadly uniform before narrowing at terminus, hook not prominent; 1) greatly expanding before narrowing at terminus, hook not prominent; 2)greatly expanding before narrowing at terminus, hook prominent
- 22. Aedeagus: Orientation. 0) straight; 1) L-shaped.
- 23. Aedeagus: Cornuti occurring on the inner margin of the curvature. 0) absent; 1) present.
- 24. Aedeagus: Cornuti occurring on the outside of the curvature. 0) absent; 1) present.
- 25. Aedeagus: Vesica lobes. 0) absent; 1) present.
- 26. Aedeagus: Ornamentation of vesica lobes. 0) absent; 1) present

Female Abdomen

- 27. Genitalia: Shape of the ductus bursae. 0) long, heavily sclerotized tube; 1) long, thin(tube-like), wider near connection to corpus bursae; 2) short, wrinkled.
- 28. Genitalia: Shape of the corpus bursae. 0) round; 1) long, thin, bulging towards terminus; 2) sac-like, unremarkable
- 29. Genitalia: Surface condition of the corpus bursae. 0) Heavily wrinkled; 1) relatively smooth, with wrinkling throughout; 2) wrinkled, but also stippled
- 30. Genitalia: Signa of the corpus bursae. 0) absent; 1) present.
- 31. Genitalia: Swollen appendix bursae. 0) absent; 1) present.
- 32. Genitalia: Shape of appendix bursae. 1) sac-like, unremarkable.