

**Two new genera and three new species of the tribes  
Nitidulini and Cyllochini (Coleoptera: Nitidulidae)  
from Australia and New Zealand, with taxonomic notes**

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**Два новых рода и три новых вида триб Nitidulini и Cyllochini  
(Coleoptera: Nitidulidae) из Австралии и Новой Зеландии  
с таксономическими замечаниями**

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**Abstract.** *Phenolia (Plesiothina) ampla* sp. n., *Gaulodes simplex* sp. n., *Ostomarcha* gen. n. (type species *Lasiodactylus marginatus* Reitter, 1873), all from Australia, and *Ceryllolodes dacnoides* gen. et sp. n. from New Zealand are described. New data on *Gaulodes costatus* Erichson, 1843 and *Ostomarcha marginata* (Reitter, 1873), comb. n., are given. A new synonymy is proposed: *Lasiodactylus marginatus* Reitter, 1873 (= *Soronia simulans* Blackburn, 1891; = *Pterohelaeus nitiduloides* H.J. Carter, 1908, synn. n.); Cyllochini Everts, 1898 = Amborotubini Leschen & Carlton, 2004, syn. n. Lectotypes for *Gaulodes costatus*, *Lasiodactylus marginatus*, *Soronia simulans* and *Pterohelaeus nitiduloides* are designated.

**Key words.** Coleoptera, Nitidulidae, Nitidulini, Cyllochini, new genera, new species, Australia, New Zealand, synonymy, lectotype designation.

**Резюме.** Описаны *Phenolia (Plesiothina) ampla* sp. n., *Gaulodes simplex* sp. n. и *Ostomarcha* gen. n. (типовой вид *Lasiodactylus marginatus* Reitter, 1873) из Австралии, а также *Ceryllolodes dacnoides* gen. et sp. n. из Новой Зеландии. Приводятся новые данные о *Gaulodes costatus* Erichson, 1843 и *Ostomarcha marginata* (Reitter, 1873), comb. n. Установлена новая синонимия: *Lasiodactylus marginatus* Reitter, 1873 (= *Soronia simulans* Blackburn, 1891; = *Pterohelaeus nitiduloides* H.J. Carter, 1908, synn. n.); Cyllochini Everts, 1898 = Amborotubini Leschen & Carlton, 2004, syn. n. Обозначены лектотипы *Gaulodes costatus*, *Lasiodactylus marginatus*, *Soronia simulans* и *Pterohelaeus nitiduloides*.

**Ключевые слова.** Coleoptera, Nitidulidae, Nitidulini, Cyllochini, новый род, новый вид, Австралия, Новая Зеландия, синонимия.

### Introduction

In the subfamily Nitidulinae, the tribes Nitidulini and Cyllochini are well defined (Kirejtshuk, 1998 etc.) due to their quite characteristic body shape and some peculiarities in the shape of the thoracic sclerites. However, discrimination of some groups is a very complicated procedure because of shortage

of pronounced characters for reliable evaluation of relationship. Many homoplasies make it difficult to find a correct attribution of some taxa. Such groups are considered in this publication and two of them are described as new genera. *Ceryllodes* gen. n. of the Cyllodini is characterized by an unusual body shape reminiscent of some members of Erotylidae, in particular the genus *Dacne* Latreille, 1796. The composition of this tribe is more or less clear in the fauna of the Eastern Hemisphere, but the fauna of the Western Hemisphere needs to be revised. Recently Leschen and Carlton (2004) erected the new tribe Amborotubini for a member of the tribe Cyllodini with unusually elongate body from Bolivia. *Ceryllodes dacnoides* gen. et sp. n. shows some similarity with the recent genera *Somatoxus* Sharp, 1890 and *Amborotubus* Leschen & Carlton, 2004 from Neotropical Region, and with a fossil genus from Spanish Lower Cretaceous, and has also some characters in common with the tribes Lawrenceosini Kirejtshuk, 1990 and Cychramptodini Kirejtshuk & Lawrence, 1992.

*Acronyms used for designations of the material examined in this study.* AMS – Australian Museum, Sydney; ANIC – Australian National Insect Collection (Department of Entomology, C.S.I.R.O.), Canberra; BMNH – Natural History Museum, London (formerly British Museum of Natural History); CNC – Canadian National Collections (Biosystematics Research Institute), Ottawa; DPIM – Department of Primary Industries, Mareeba; FMNH – Field Museum of Natural History, Chicago; MACL – Macleay Museum at the Sydney University; NRS – Naturhistoriska Riksmuseet, Stockholm; NZAC – New Zealand Arthropod Collection, Landcare Research, Auckland; QM – Queensland Museum, Brisbane; SAM – South Australian Museum, Adelaide; TMB – Természettudományj Múzeum, Budapest; USNM – National Museum of Natural History, Washington, DC; ZIN – Zoological Institute of the Russian Academy of Sciences, St. Petersburg; ZMB – Museum für Naturkunde an der Humboldt-Universität, Berlin; ZMUC – Zoological Museum at the Copenhagen University.

***Phenolia (Plesiothina) ampla* Kirejtshuk, sp. n. (Figs 1–7)**

*Diagnosis.* This new species is the only representative of the subgenus *Plesiothina* in Australia (other members of the subgenus are characteristic of the Indo-Malayan Region). It is well distinguished from all described species by the rather wide body with very widely explanate sides, peculiar coloration, and particularly by the very distinct paramedian depressions at apex of the female pygidium.

*Description.* Male (holotype). Length 6.2, width 3.6, height 2.0 mm. Oval, moderately convex dorsally and ventrally; reddish; metasternum, ventrite 1 and subsutural part at elytral base reddish brown; dorsal surface of head, wide median stripe on pronotum, scutellum and most of elytra black (only small, diffusely spread round spots on elytra reddish yellow); with faint fat lustre; dorsum with moderately dense subrecumbent hairs nearly 1.5 times as long as intervals between their insertions, yellowish on light parts of surface and brownish on dark ones; elytra with about 9 longitudinal, not quite distinct rows of semi-erect hairs; underside with light and short subrecumbent hairs somewhat longer than intervals between their insertions; pronotal and elytral sides shortly and finely ciliate.



**Fig. 1.** *Phenolia (Plesiothina) ampla* sp. n.

Head and pronotum with not quite distinct oval punctures nearly as large as, or larger than eye facets; interspaces between them about half a puncture diameter, densely reticulated; punctures on pronotal disc somewhat larger and considerably sparser. Elytra with larger and less distinct punctures in comparison with those on pronotum and head, and with microreticulation rather reduced and smoothed. Pygidium and underside with puncturation and sculpture similar to those on head, but punctures somewhat smaller and sparser, microreticulation on pygidium, pronotum and metasternum more relief, and that on ventrites smoothed.

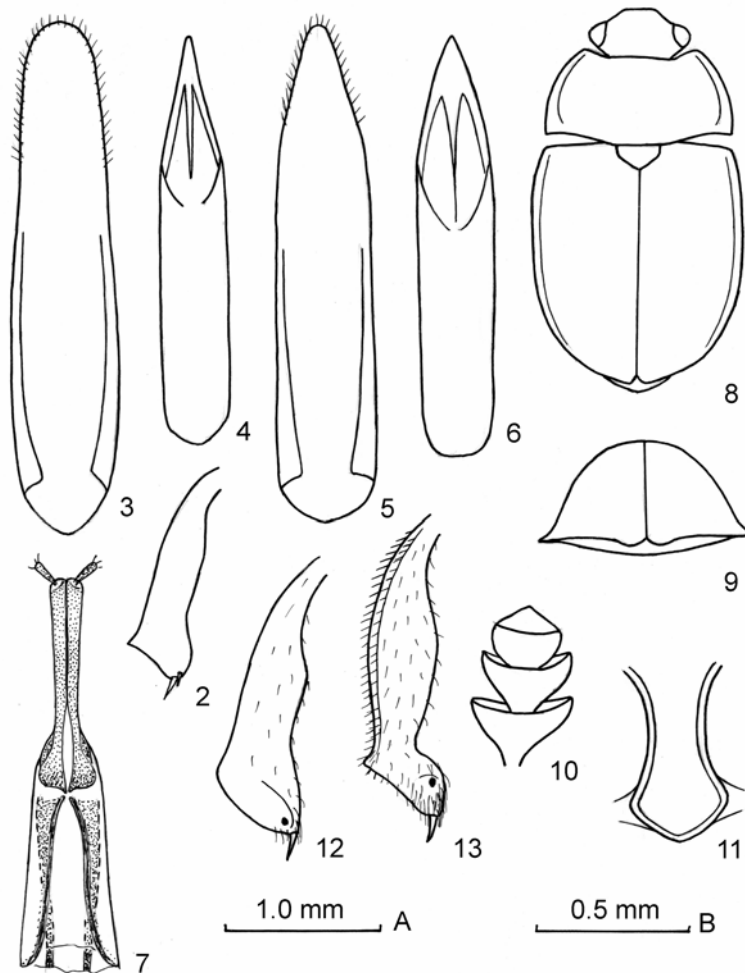
Head weakly concave, shorter than distance between eyes composed of moderately large facets. Labrum moderately exposed, with wide and angular median excision. Mandibles well prominent. Length of antennae scarcely exceeding width of head; club subovate (1 and 1/4 as long as wide), composing about 1/4 of total antennal length. Pronotum slightly and evenly convex, widely subexplanate along sides, its rounded anterior and posterior angles moderately projecting. Scutellum subtriangular, with rounded apex. Elytra with well raised humeri, gently sloping along widely explanate sides and with rather projecting apices. Pygidium with apex transversely subtruncate. Anal sclerite with angular apex moderately far exposed from under pygidial apex. Distance between mesocoxae subequal to width of antennal club, that between procoxae about 3/4 of distance

between mesocoxae, that between metacoxae about 1.5 times distance between procoxae. Prosternal process strongly widened before its almost transverse apex. Metasternum somewhat longer than prosternum, with median depression at deeply and angularly excised posterior edge between metacoxae. Submetacoxal line slightly arcuately deviating at middle of cavity and returning at its lateral edge. Hypopygidium bisinuate at apex, nearly half as long as ventrite 1.

Tibiae subtriangular, with moderately developed subapical process; mesotibia slightly curved; protibia somewhat wider, meso- and metatibiae somewhat narrower than antennal club. Femora simple, profemur about 1 and 1/3, mesofemur about 1 and 2/3, and metafemur nearly twice as wide as corresponding tibiae. Protarsus about half as wide as protibia, meso- and metatibiae considerably narrower; claws slightly bulbaceous and with clear bisetose empodium between.

Aedeagus well sclerotized.

*Femal e.* Differs from male in more projecting (more acute) elytral apices, widely rounded apices of pygidium and hypopygidium, and a pair of paramedian distinct and rather deep depressions separated by rather sharp median ridge at distal half of hypopygidium. Tibiae (particularly protibia) usually somewhat narrower and with less prominent subapical process, and mesotibia not curved.



**Figs 2–13.** Nitidulini. 2–7 – *Phenolia (Plesiothina) ampla* sp. n.: 2 – mesotibia, dorsally; 3 – tegmen of specimen from Australia, ventrally; 4 – penis trunk of the same specimen, dorsally; 5 – tegmen of specimen from New Guinea, ventrally; 6 – penis trunk of the same specimen, dorsally; 7 – ovipositor, ventrally; 8–13 – *Gaulodes costatus* Er.: 8 – body, dorsally; 9 – elytra, posteriorly; 10 – antennal club; 11 – prosternal process, ventrally; 12 – male protibia, dorsally; 13 – male mesotibia, dorsally. Scales: A – to Figs 8, 9; B – to Figs 2–7, 10–13.

Ovipositor scarcely modified and moderately sclerotized.

*Variations.* Length 4.7–6.6, width 3.0–3.7 mm. The holotype has a typical coloration, but many specimens are more or less lighter to unicolorous yellowish; sometimes coloration is darker and more monotonous. Puncturation and microreticulation also vary to a certain extent; frequently dorsal puncturation becomes almost uniform and more distinct than that in the holotype, and sometimes the underside looks like very shining. Pronotal and elytral sides are not always as wide as those in the holotype.

*Material.* Holotype: ♂ (ANIC), Queensland, “Cairns 1/46”, “J.G. Brooks Bequest 1976”. Paratypes. Queensland: 1 ex. (ZIN), same data as holotype; 1 ex. (ZIN), “Cairns, 1/42”, “J.G. Brooks Bequest, 1976”; 2 exx. (ANIC), “Kuranda, 1/47 (2/47)”, “J.G. Brooks Bequest, 1976”; 1 ex. (SAM), “QLD, Kuranda, rainforest, at light, 3 Jan 1987, C. Rojowski”; 4 exx. (ANIC and ZIN), “Cardstone, Qld, 15.X.1966, J.G. Brooks”; 1 ex. (ZIN), “Barron Falls, Q, 2.I.1965, J.G. Brooks”; 1 ex. (ANIC), “15°04'S 145°07'E, Mt. Webb Nat. Park, QLD, 28–30 Sept. 1980, T. Weir, at light”; 1 ex. (QM), “Mt. French S.E., Qld, 15 Oct. 1983, G.B. Monteith”; 1 ex. (ZIN), “Bellenden Ker Range, N Q, 1 km S of Cable Tower, 6 Oct.–7 Nov. 1981, 500 m Earthwatch/QLD Museum, Baited Window Trap”; 2 exx. (QM), “Bellenden Ker Range, N Q, Cable way Base Stn., 100 m, 17 Oct. – 9 Nov. 1981, Earthwatch/QLD Museum, rainforest, M V light trap”; 3 exx. (BMNH, QM and ZIN), “Kirrama Range, N.E. QLD, (Barracks area) 600 m, 9–12 Dec. 1986, Monteith, Thompson & Hamlet”; 1 ex. (QM), “Dunwich area, Stradbroke Is., Qld., 24–26.XI.1985, at light”; 2 exx. (QM), “NS QLD, 30 km W of Cape Tribulation (Site 6), 2 Oct. 1982, Monteith, Yeates & Thompson”, “QM Berlesate, 439, 16°04'S 145°27'E, Rainforest, 500 m, Sieved litter”; 1 ex. (QM), “Brisbane, Qld., 25.X.61, Light Trap”; 1 ex. (QM), “Little Cader Ck., Mt. Spec., NE Q, 1.II.65, E.C. Dahms, 1086 ft, to light”; 1 ex. (QM), “nr. Pooma, Lake Cooloola, S.E. Q, E. Dahms, 3–13.III.1970, Rain Forest, to light”; 4 exx. (DPIM and ZIN), “Atherton, N Qld, 29.IV.1983, J.D. Brown, light trap”, “on loan from Dept. Prim. Industries Mareeba, Qld, Aust.”; 1 ex. (ANIC), “on basement DPI building, Indooroopilly, near F. F. D., rotting fruit, 7.X.1988, G. White”; 5 exx. (QM and ZIN), “Nth Stradbroke Is., Q, 20.IV.1968, T. Weir”; 2 exx. (QM and ZIN), “Upper Mulgrave River, N. Qld., 1–3.XII.1965, G. Monteith”; 1 ex. (SAM), “Rockhampton”; 1 ex. (NRS), “QSL, Canungra, light trap, 100 m, 14–16.12.1992, B. Gustafsson”. New South Wales: 1 ex. (ANIC), “Alstonville, NSW, 27 Dec. 1985, G.R. Brown”, “at mercury vapour lamp”, “B.C.R.I.”; 1 ex. (ANIC), “Tuchi Tuchi Ck., 15 km SSE of Lismore, NSW, at Mercury Vapour Light, 8 April 1987, G.R. Brown”, “B.C.R.I.”; 1 ex. (AMS), “M. V. Lamp, Victoria Park near Alstonville, NSW, 31 Jan. 1983, K.C. Khooz & D.K. McAlpine”; 1 ex. (MACL), “Australia, NSW, Helensville, 3 December 1988, Richard Bejsak”. Australia. 1 ex. (TMB), “Australia occid., 1192”. Papua New Guinea. 2 ♂ (TMB and ZIN), “N Guinea Biró, 1899, Sattelberg Huon-Golf”; 1 ex. (USNM), “Marobe Distr., Wau, 1200 mts, 8–14 Dec. 1976, G.F. Hevel & R.E. Dietz”; 1 ex. (CNC), “New Guinea, Lae, Oct. 19. 1970, R.E. Parrott”.

*Etymology.* The epithet of this species means “wide”, “spacious”, referring to the rather widely explanate sides of body in the new species.

### Genus *Gaulodes* Erichson, 1843

Type species *Gaulodes costatus* Erichson, 1843, by monotypy.

*Diagnosis.* This genus is quite distinct from *Phenolia* in the more convex body in general with rather convex elytral apices, narrowly subexplanate pronotal and elytral sides, features of elytral puncturation and particularly in the rather modified structure of the ovipositor. The antennal grooves in species of this genus are slightly convergent, subparallel-sided, although according to other features of this genus it can be regarded as a member of the *Phenolia*-complex of genera (see the diagnoses and comparison of all genera of the complex in Kirejtshuk, Kvamme, 2002).

#### *Gaulodes costatus* Erichson, 1843 (Figs 8–18)

*Gaulodes costatus* Erichson, 1843: 316.

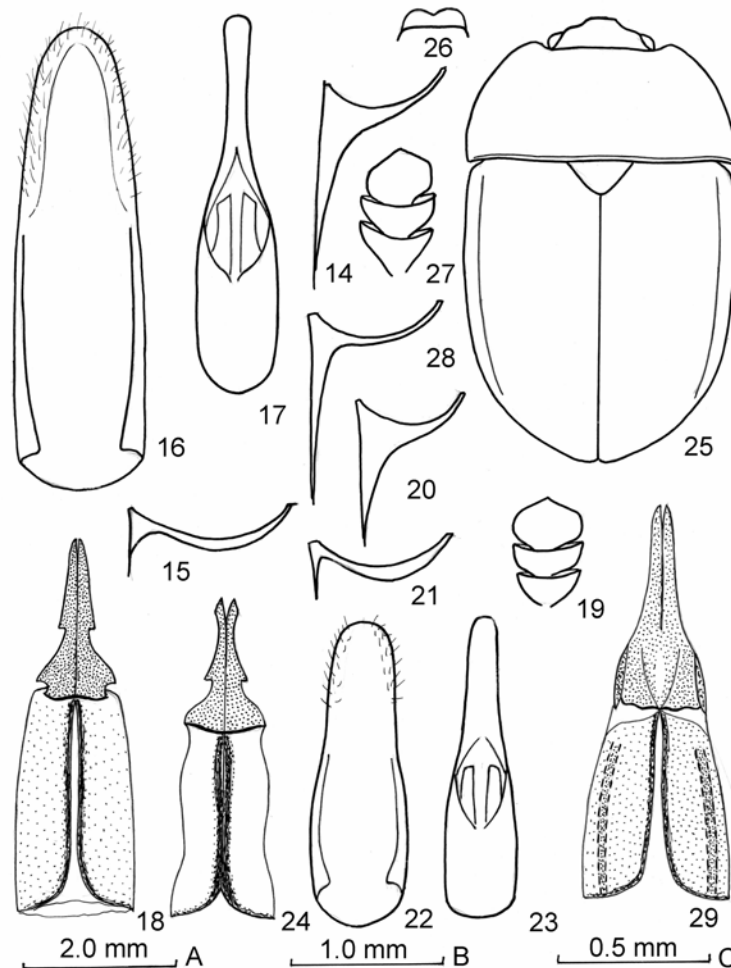
*Diagnosis.* This species can be easily diagnosed after the below key, and particularly due to its antennal club, indistinct elytral puncturation, longitudinal rows of setiferous tubercles on elytra, configuration of both submeso- and submetacoxal lines, peculiar secondary sexual characters and genital structures in both sexes.

*Additional description.* Length 4.7–5.8, width 2.7–3.2, height 1.4–1.7 mm. Elongate oval, rather convex (especially at elytra) dorsally and moderately convex ventrally; dorsum usually subunicolorous dark brown to almost black with nearly reddish pronotal and elytral sides; underside and appendages considerably lighter (reddish or brownish); with fat lustre; dorsum with thickened reddish hairs, their length subequal to width of explanate elytral sides, diffuse on head and pronotum, but forming longitudinal rows in accordance with setiferous tubercles on subcostate elytra; between these hairs much shorter and thinner hairs scattered; pronotal and elytral sides finely ciliate.

**Male.** Metasternum rather strongly concave along midline; elytral apices forming nearly common gentle curve; pygidium and hypopygidium subtruncate at apex, anal sclerite exposed from under apex of pygidium; protibia somewhat dilated and slightly curved before apex, mesotibia with the *Phenolia*-type of secondary sexual modification. Aedeagus heavily sclerotized.

**Female.** Metasternum feebly depressed along midline; elytral apices more acute and somewhat separated from each other; pygidium and hypopygidium with widely rounded apices; pro- and mesotibiae simple. Ovipositor well sclerotized.

**Material.** Lectotype, here designated: ♂ (ZMB), "*costatus*, Neu Holl.", "8648". Paralectotypes. 1 ♀ (ZMB) with labels similar to those in lectotype (labeled as paralectotype by J. Jelinek); 1 ex. (BMNH), "*Gaulodes costatus*, Type", 68-106". Victoria: 4 exx. (ANIC and ZIN), "Rifle Rng. 5 km N Cann River VIC 16-17 Mar 1983 J. Doyen coll.", "J.F. Lawrence Lot 83-20, *Piptoporus australiensis*"; South Australia: 2 exx. (MACL), "S Austr." New South



**Figs 14–29.** Nitidulini. 14–18 – *Gaulodes costatus* Er.: 14 – submesocoxal line, ventrally; 15 – submetacoxal line, ventrally; 16 – tegmen, ventrally; 17 – penis trunk, dorsally; 18 – ovipositor, ventrally; 19–24 – *G. simplex* sp. n.: 19 – antennal club; 20 – submesocoxal line, ventrally; 21 – submetacoxal line, ventrally; 22 – tegmen, ventrally; 23 – penis trunk, dorsally; 24 – ovipositor, ventrally; 25–29 – *Ostomarcha marginata* (Rtt.): 25 – body, dorsally; 26 – anterior part of head and labrum; 27 – antennal club; 28 – submesocoxal line, ventrally; 29 – ovipositor, ventrally. Scales: A – to Fig. 25; B – to Figs 14, 15, 19–21, 26–28; C – to Figs 16–18, 22–24, 29.

W a l e s : 4 exx. (ANIC and ZIN), "10 km N of East Lynne NSW Jan 1979 J.F. Lawrence", "J.F. Lawrence, Lot 79–2, *Piptoporus australiensis*"; 1 ex. (ANIC), "NSW – Dorrigo N. P., 2.7 km Never Never, 760 m, 28.II–5.III.1980, subtrop. Rainforest, A. Newton, M. Thayer", "in and under rotten mushroom"; numerous imagines and larvae (ANIC and ZIN), "NSW, Clyde Mtn., Lyon's Rd., 0.2–1.0 km King Rd., 3.12.1990, A. Kirejtshuk, W. Dressler, in fruit-bodies of *Piptoporus australiensis* in dead Eucalyptus after fire"; 1 ex. (ANIC), "Durras Mt., NSW, from broched fungus, on spotted Gun, 13.V.65, M.S. Upton"; 2 exx. (ANIC and ZIN), "Wauchope, NSW (31.27S 152.44E), 72 km W on Oxley Highway, 4.I.70, wet sclerophyll, at light, Britton, Holloway, Misko"; 1 ex. (ANIC), "NSW, Nundle S.F., 1 Mar 1982, (S1693) G.A. Webb, tunnel fungi (*Piptoporus*)"; 1 ex. (ANIC), "Mt. Keira, NSW, 23:2:1966, V.J. Robins"; 1 ex. (ANIC), "Kioloa S.F., 15 km NE Batemas Bay, NSW, 3 Oct. 1987, C. Reid"; 1 ex. (ZIN), "Kioloa S.F., NSW, Rainforest gully 5 km SW Kioloa, 23 Feb. 1986, C. Reid", "under *Euc. saligna* bark"; 1 ex. (ANIC), "Kioloa S.F., 10 km SW Kioloa, NSW, 13 May 1987, C. Reid, *Piptoporus* (Yellow)"; numerous imagines and larvae (ZIN), "NSW, Kioloa St. Forest, near Durras Lake, 3.1.1991, A. Kirejtshuk, in fruit-bodies of *Piptoporus australiensis*"; 2 exx. (MACL), "Rope's Ck., N S Wales"; 2 exx. (ZIN), "N S Wales"; 2 exx. (AMS), "Gosford, N S Wales"; 2 exx. (AMS and ZIN), "West Pymble, nr Sydney, N S W, 22.II.1985, D.J. Scambler, at black light". Q u e e n s l a n d : 1 ex. (ANIC), "Binna Burra, QLD, Lamington Nat. Pk., 25 Mar.–4 Apr. 1985, J. & N. Lawrence", "J.F. Lawrence, Lot 85–1, *Piptoporus australiensis*"; 1 ex. (QM), "Natural Pk., Q, H. Hacker, Dec. 1919"; 1 ex. (ANIC), "Richmond (B.C.R.I.)". A u s t r a l i a . 1 ex. (ZMUC), "Australia", "*Cryptarcha* Shuck.", "Mus. Western."; 1 ex. (CNC), "Ravensbourne, 26 mi. N. Toowoomba, Qld., 21.I.1975, H. & A. Howden".

**Bionomics.** This species is rather common in the sclerophyll and temperate rainforests and inhabits the fruit-bodies and wood with hyphae of *Piptoporus australiensis*, where larvae develop. Usual findings of imagoes and larvae of *G. costatus* seem to happen in the forest sites of about 1–2 years after fire.

### ***Gaulodes simplex* Kirejtshuk, sp. n. (Figs 19–24)**

**Diagnosis.** This species is characterized, in comparison with its congener, by the more slender and more shining body with distinct elytral puncturation, subflattened metasternum in both sexes, sparsely punctured and with narrow transverse depression behind mesocoxae, and lack of any expressed character of sexual dimorphism in the structure of tibiae. See also the diagnosis of *G. costatus* and the key below.

**Description.** M a l e (holotype). Length 4.2, width 2.3, height 1.3 mm. Elongate oval, rather slender; rather convex (especially at elytra) dorsally, and moderately convex ventrally; black, with reddish dark brown pronotal and elytral sides, anterior part of head, underside and appendages, but tarsi, antennae and mouthparts considerably lighter (almost reddish); shining; dorsum with diffuse, thickened reddish suberect hairs, somewhat longer than width of subexplanate part of elytral sides, forming longitudinal rows on subcostate elytra, which lack any trace of tubercles, and much shorter (nearly 1/3 as long as former) and thinner diffuse hairs between rows; pronotal and elytral sides extremely finely ciliate.

Head with not quite regular punctures about 1.5 times as large as eye facets, interspaces between them about 1/3 of a puncture diameter, smooth and shining. Pronotum with puncturation and sculpture about as those on head, but punctures considerably larger and sparser, separated by own diameter. Elytra with punctures more distinct than those on head and pronotum, forming 2 irregular rows between not tuberos longitudinal costae. Underside with puncturation and sculpture about as those on head and pronotum, but punctures somewhat more distinct and on ventrites 1–4 sparser, interspaces between them 1/2–2/3 of a puncture diameter (on prosternum and hypopygidium) to 1–2 puncture diameters (on ventrites 1–4), smooth and shining; only in middle of metasternum punctures very small and sparse, with smooth intervals between them.

Head considerably shorter than distance between eyes, strongly concave behind antennal insertions. Labrum truncate at apex and with narrow median excision. Mentum subquadrangular, with somewhat rounded sides, about 3 times as wide as long. Antennae about 3/4 as long as head broad; their club (nearly oviform, with first segment as wide as last one) constituting about 2/7 of total antennal length. Pronotum with subexplanate sides, base very narrowly bordered. Elytra with well raised humeri, moderately subexplanate sides and adsutural lines feebly visible only in distal 1/4. Pygidium subtruncate at apex. Prosternal process as in *G. costatus*, about 1.5 times as wide as antennal club. Metasternum with narrow transverse depression behind mesocoxae. Submesocoxal line arcuately deviating from posterior edge of cavity only at its medial end. Submetacoxal line widely deviating from posterior edge of mesocoxal cavity and returning to it at its lateral end. Apex of hypopygidium narrowly rounded. Epipleura slightly elevated laterally.

Legs comparatively narrow. Tibiae slightly widened to apex; protibia nearly as wide as antennal club; meso- and metatibiae somewhat narrower. Femora simple, pro- and mesofemora about 1.5 times, metafemur about twice as wide as corresponding tibiae. All tarsi narrow, with rather thin claws.

Aedeagus heavily sclerotized.

F e m a l e . Differs from male only in pygidial apex narrowly rounded to subacute. Ovipositor moderately sclerotized.

**Variations.** Length 4.0–4.6 mm. In addition to a certain variability in the puncturation and microreticulation, some paratypes are darker or light brown, and lightest of them with reddish paramedian spots at sides of scutellum and in anterior third of elytral disc, and also reddish prohypomera, epipleura, antennae and legs.

*Material.* Holotype: ♂ (ANIC), Queensland, "M.T.Spec. N, Q 2/72, G.B., Q, 1089", "G. Brooks Bequest 1976". Paratypes. Queensland: 1 ♀ (ZIN), with labels as in holotype; 2 ♀ (ANIC), "49 m. W Paluma, N Q, 3030', 23.2.72, J.G. Brooks «Fish Lure» Q 1089"; 3 ♀ (ANIC and ZIN), "Swan Road, Paluma, N.Q., 9.1.68, G. Brooks".

*Etymology.* The epithet of this species means "simple", "easy", "unaffected".

### Key to the species of *Gaulodes*

1. 1st segment of antennal club wider and larger than each of following ones; elytral puncturation indistinct; not quite expressed longitudinal costae with row of setiferous tubercles. Male: protibia dilated and slightly curved before apex and with raised ventral subapical process; mesotibia with the *Phenolia*-type of secondary sexual modification; metasternum strongly concave. Female: pro- and mesotibiae simple; metasternum slightly depressed. 4.7–5.8 mm ..... *G. costatus* Erichson, 1843
- 1st segment of antennal club nearly as large as next one; elytral punctures more or less distinctly outlined; elytra without both clearly expressed longitudinal costae and rows of setiferous tubercles. Male: pro- and mesotibiae, and also metasternum without expressed character of sexual dimorphism. 4.0–4.6 mm ..... *G. simplex* sp. n.

### Genus *Ostomarcha* Kirejtshuk, gen. n.

Type species *Lasiodyctylus marginatus* Reitter, 1873.

*Diagnosis.* *Ostomarcha marginata* comb. n. is characterized by ellipse-like, evenly convex body shape, unmodified mouthparts, legs and antennae, moderately separated coxae in each pair, and subexplanate pronotal and elytral sides. This genus seems to occupy an intermediate position between the *Soronia*-complex (Kirejtshuk, 2003) and *Aethina*-complex (Kirejtshuk, Lawrence, 1999), but *O. marginata* is distinct from the members of these complexes represented in the Australian fauna in the extremely dense and obliterated puncturation on the dull and evenly convex dorsal surface; from the first complex it also differs in its subparallel-sided antennal grooves. *O. marginata* is somewhat similar to *Australycra obscura* (Blackburn, 1891), but differs from the latter in the more even and less convex body, very wide pronotal base with rather projecting posterior angles, peculiarities of the puncturation and microreticulation, and particularly in the structure of the genitalia in the both sexes. In addition, *O. marginata* resembles members of the genera *Taracta* Murray, 1867 and *Perilopa* Erichson, 1843 (the *Ipedia*-complex of genera), but has larger body with regularly elliptic outline and evenly convex dorsum, diffuse (not seriate) puncturation on the elytra, shorter and wider antennal club, much narrower prosternal process, very distinct shape of the labrum, lack of the styli in the ovipositor; it also differs from *Taracta* in the complete elytra.

*Notes.* This genus is represented by the only species, and therefore the description of it rather overlaps with the description of the species ("*descriptio generica specifica*").

*Etymology.* The name of this genus is formed from the generic name "*Ostoma*" (Peltidae) and "*archa*", the second root of many generic names (for example, *Cryptarcha*, *Amlearcha* etc.).

#### *Ostomarcha marginata* (Reitter, 1873), comb. n. (Figs 25–29)

*Lasiodyctylus marginatus* Reitter, 1873: 92; *Soronia simulans* Blackburn, 1891: 105, **syn. n.**; *Pterohelaeus nitiduloides* H.J. Carter, 1908: 406 (described among Tenebrionidae), **syn. n.**

*Redescription.* Female (lectotype of *Lasiodyctylus marginatus*). Length 6.1, width 3.5, height 1.5 mm. Not strongly convex dorsally; dark brown to almost black, pronotal and elytral sides as well as underside and appendages brownish red; with faint fat lustre; dorsum with moderately dense, short and comparatively thin hairs, and also with much sparser and rather long hairs forming on elytra more or less regular longitudinal rows.

Head with irregular and shallow punctures about 1.5 times as large as eye facets, interspaces between them 1/4–1/3 of a puncture diameter, finely and densely microreticulated, almost alutaceous. Pronotum punctured and sculptured similar to head, but punctures considerably denser. Scutellum and pygidium with shallow and scarcely outlined punctures. Elytra with puncturation and sculpture similar to those on scutellum, but punctures more distinct and longitudinal costae not quite expressed. Underside punctured and sculptured similar to head and pronotum, but punctures sparser and more distinct, interspaces between them 1/2–2/3 of a puncture diameter and smoothly microreticulated.

Head comparatively small and short, strongly concave behind antennal insertions. Mentum subquadrangular, with somewhat rounded sides, about 3 times as wide as long. Antennae about 3/4 as long as head broad; their club composing about 2/7 of the total antennal length. Pronotum with subexplanate sides, base very narrowly bordered. Elytra with well raised humeri, moderately subexplanate sides and without trace of adsutural lines. Pygidium with widely rounded, but slightly projecting apex. Prosternal process similar to that in *G. costatus*, about 1.5 times as wide as antennal club. Metasternum deeply concave in distal half. Submesocoxal line arcuately deviating from posterior edge of mesocoxal cavity only at its lateral end. Submetacoxal line follows closely posterior edge of metacoxal cavity. Apex of hypopygidium subacute. Epipleura nearly horizontal with longitudinal concavity between their edges.

Legs comparatively narrow. Tibiae slightly widened apically; protibia nearly as wide as antennal club; meso- and metatibiae somewhat narrower. Femora simple, about twice as wide as tibiae. All tarsi with narrowly lobed tarsomeres 1–3 and thin claws.

Ovipositor moderately sclerotized.

**Male.** Legs without secondary sexual dimorphism. Pygidial apex widely rounded to subtruncate. Anal sclerite rather exposed from under apex of pygidium. Aedeagus of the *Phenolia*-type, with rounded apices of tegmen and penis trunk.

**Variations.** Length 5.8–7.7, width 3.4–3.7 mm. Some variability is observed in the coloration, although most specimens have dark brown dorsum and bright reddish brown underside and appendages. The puncturation and sculpture of the integument also show some level of variability.

**Bionomics.** Imagines appear to inhabit mainly spaces under bark of dead trees.

**Material.** Lectotype of *Lasiodactylus marginatus*, here designated: ♀ (NMW), “Thorey 1867”, black small quadrangle, quadrangle with a black corner and number “74”, “*Lasiodactylus marginatus* Rtt.” Lectotype of *Soronia simulans*, here designated (BMNH), and paralectotype, ♂ (SAM), “Victorian Alps Blackburn”, “3631 A7”, “*Soronia simulans* Cotype”. Lectotype of *Pterohelaeus nitiduloides*, here designated: ♂ (ANIC–MACL), and paralectotype, ♀ (ANIC–MACL): “Blue Mts.”, “On permanent loan from Macleay Museum University of Sydney”, “*Pterohelaeus nitiduloides* M.S. Carter” (written by descriptor). Queensland: 1 ex. (NRS), “Cape York”, “Thorey”. New South Wales: 1 ex. (ANIC), “Blackheath, NSW, 4.12.46, C.H.E.”; 4 exx. (ANIC, SAM), “Blue Mts., N. S. Wales”; 2 exx. (ANIC and ZIN), “Horse Swamp, NSW, 24 km E of Moonan Flat Mt. Royal Rg., 6 Nov. 1982, J.T. Doyen”; 1 ex. (MACL), “N S Wales”; 3 exx. (MACL and ZIN), “Rope’s Ck., N S Wales”; 1 ex. (ANIC), “Wootton, NSW, 25 km N of Bulahdelah, 6 Nov. 1986, R.B. Holliday, at light”. Australian Capital Territory: 16 exx. (ANIC and SAM), “35°22’S 148°50’E, Blundells Ck., 3 km E of Piccadilly Circus, 850 m, ACT, Jan.–Mar. 1984, Weir, Lawrence, Johnson”, “flight intercept window/trough trap”; 1 ex. (ANIC), “35°35’S 148°59’E, ACT, Honeysuckle Ck., Tracking Station, 20 Nov. 1988, C. Reid, flowering *Euc. pauciflora*”. Victoria: 1 ex. (MVM), “Cockatoo Ck., 12.33, Goudie”. Australia: 2 exx. (SAM), “Vicinity of Jesolan Caves (J.C. Wiburd)”.

### Genus *Cerylloides* Kirejtshuk, gen. n.

Type species *Cerylloides dacnoides* sp. n.

**Diagnosis.** This genus belongs to the tribe Cyllodini because of the convex body with sparse dispersed puncturation, glabrous dorsum and reduced pubescence on the abdominal segments and appendages, folded base of pronotum covering elytral and scutellar bases, distinctly carinate mesosternum and quite characteristic genitalia in the both sexes. *Cerylloides* gen. n. is separated from most genera of the subfamily due to its elongate and ventrally convex body, distinctly bordered pronotal sides, rather long elytra with extremely steeply sloping sides and lateral edges almost declined ventrally, widely separated coxae in each pair, characteristic submeso- and submetacoxal lines and absence of the intermesocoxal line.

The new genus is most similar to *Somatoxus* and to an undescribed fossil genus from the Lower Cretaceous (Soriano, Kirejtshuk, in preparation), especially in the elongate and ventrally convex body, seriate puncturation on elytra, arcuately deviating from posterior edge of coxal cavities submetacoxal lines, deeply depressed lines at lateral edges of each ventrite, elevated laterally epipleura, narrow tarsi, and some peculiarities of the aedeagal structure. However, the new genus clearly differs from them in the more regularly elliptic body, steeply sloping pronotal and elytral sides, transversely depressed head, markedly smaller eyes, long and subparallel-sided antennal grooves, deeply excised anterior edge of pronotum, shorter elytra with rounded apices, flattened and widened posteriorly prosternal process, widely separated coxae in each pair, straight posterior edge of metasternum between metacoxae, shorter legs, wider tibiae and protarsus, lobed meso- and metatarsomeres 1–3. In addition, the new genus is quite distinct from *Amborotubus* in the more regularly elliptic body, smaller eyes, moderately projecting anterior part of the frons, seriate puncturation on elytra, not modified ultimate palpomeres, moderately dilated



tibiae and femora, distinctly lobed and not shortened tarsi, not so narrowly separated pro- and mesocoxae, widely separated metacoxae, and the rather modified structure of its ovipositor.

*Description.* Body elongate oval, convex dorsally and ventrally; elytra very finely punctured and mostly with smooth interspaces between longitudinal rows of sparse punctures. Head moderately retracted into prothoracic segment, with distinct subparallel-sided antennal grooves. Labrum moderately projecting, with short median incision. Mandibles moderately exposed from under labrum. Mentum subpentagonal, narrowed anteriorly, about 3 times as wide as long. Last labial and maxillary palpomeres slightly narrowed apically. Pronotum strongly convex, with wide border at lateral edges, deeply excised fore edge and almost straight hind edge. Elytra much longer than combined width and narrowed to apices leaving small part of pygidial apex uncovered. Pygidium elongate and covering apex of anal sclerite in male. Prosternum medially convex and subcarinate at anterior edge, with flattened process widened anteriorly before transverse apex. Mesosternum distinctly carinate and with distinct depressions at sides of carina. Submesocoxal line subrectilinearly deviating from middle of hind mesocoxal edge and curving only at edge of metepisternite. Metasternum slightly convex medially, without traceable intermesocoxal line and median suture before its straight posterior edge between metacoxae. Submetacoxal line distinct and arcuately deviating from posterior edge of metacoxa. Ventriles rather convex and with depressed lines along their lateral edges; ventrite 1 longest, somewhat longer than ventrites 2 and 3 combined. Hypopygidium widely rounded at apex. Epipleura moderately elevated laterally. Tibiae subflattened and widened apically, with a pair of comparatively short spurs at apex, rather different from one another in shape and length. Femora of usual shape and with gently rounded anterior and posterior edges. Tarsi of all legs with narrowly dilated tarsomeres 1–3 and with thin simple claws.

*Male.* Anal sclerite elongate rather than transverse and rounded at apex; ventral plate divided into 2 sclerotized pieces not fused with spiculum gastrale; aedeagus very long and slightly dorsoventrally curved; tegmen with truncate apex bearing short and thin hairs; penis trunk sharply acute and with a pair of sclerotized lobes covering apical orifice; inner sac of penis with heavily sclerotized armature.

*Female.* Ovipositor with gonocoxites distinctly divided into inner and outer lobes, shortly split at apex and with short subapical indistinct styli.

*Etymology.* The name of this genus is formed from the generic name “*Cerylon*” (Cerylonidae) and a part of the generic names *Cyllodes*, *Pallodes* etc. (Nitidulidae)

#### ***Ceryllodes dacnoides* Kirejtshuk, sp. n. (Figs 20–30)**

*Description.* *Male* (holotype). Length 2.6, width 1.2, height 0.7 mm. Strongly convex dorsally and moderately convex ventrally; dorsum dark reddish brown, with somewhat lighter pronotum at anterior edge and yellowish humeral spot on each elytron, but middle of metasternum and ventrite 1 blackish; shining and glabrous, only last abdominal segment and appendages with short, fine, rather conspicuous hairs.

Surface of head and pronotum with distinct punctures, much smaller than eye facets, with interspaces between them smooth, 4–5 times a puncture diameter. Elytra with longitudinal rows of punctures twice as large as those on head and pronotum, with intervals between rows about 3 puncture diameters; interspaces between rows with sparser and smaller punctures than those on head and pronotum and completely smooth. Pygidium and hypopygidium with punctures as large as the larger punctures on elytra, interspaces between them about 2 puncture diameters and very finely microreticulated. Thoracic sterna with punctures as large as the smaller ones on elytra, interspaces between them 2–3 puncture diameters and smooth; surface of ventrites similar but with less distinct punctures and smooth to somewhat alutaceous.

Head about 3/4 as long as wide, with transverse depression behind antennal insertions. Antennae somewhat longer than head width, their club about 1 and 1/4 as long as wide and constituting 3/10 of total antennal length. Last labial palpomere about 1.5 times as long as wide at base. Pronotum with widely rounded anterior and posterior angles, steeply sloping at scarcely arcuate sides. Scutellum subtriangular with rounded apex. Elytra about 1 and 1/5 as long as combined width, gradually narrowed to separately rounded apices, their sides steeply sloping and with lateral edges scarcely visible from above. Pygidium moderately projecting and widely rounded at apex. Antennal grooves subparallel and reaching posterior margin of head. Prosternal process flattened, about 1 and 1/3 as wide as antennal club, with distinct subangular median excision at non-bordered apex. Distance between mesocoxae twice, and that between metacoxae almost thrice as broad as distance between procoxae. Mesosternum sharply carinate. Submesocoxal line almost reaching middle of metepisternite. Metasternum slightly convex. Submetacoxal line nearly reaching middle of ventrite 1 behind coxae. Hypopygidium somewhat shorter than ventrite 1. Epipleura at base about 3/4 as wide as antennal club.

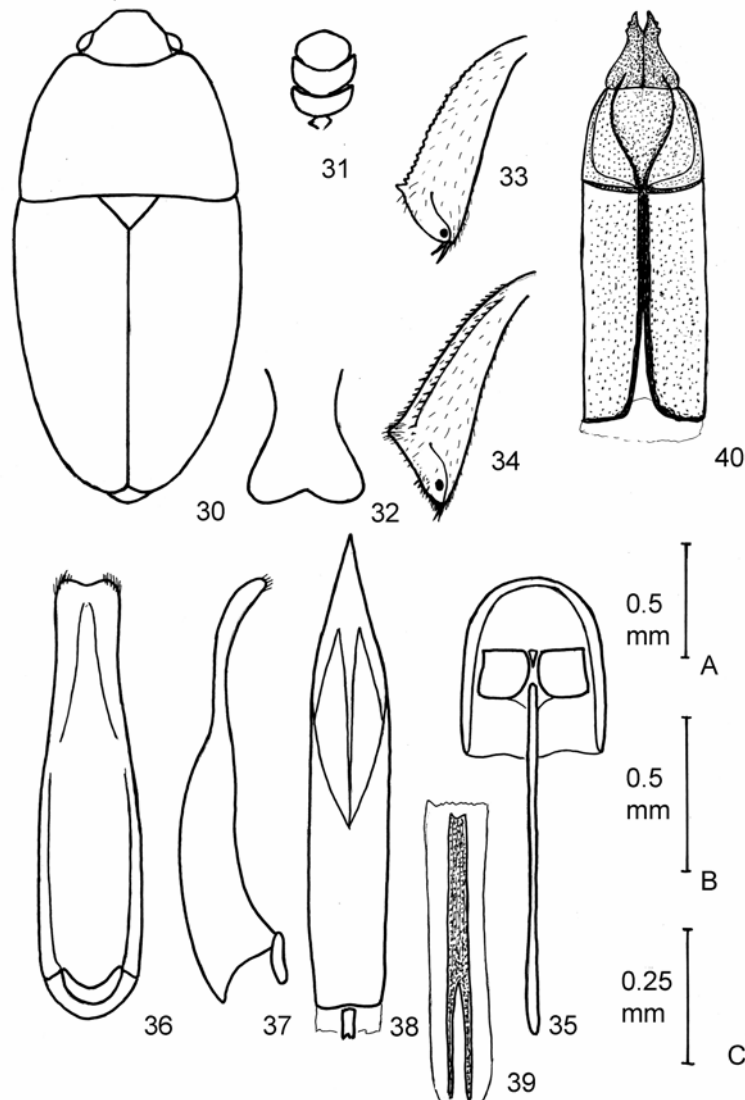
All tibiae similar in shape, about as wide as antennal club and subangular at outer subapical angles; outer edge of meso- and metatibiae with dense row of short and stout spines, between which some subapical spines much more prominent. Femora about 1 and 1/2 as wide as tibiae, with gently curved anterior and posterior edges. Protarsus about 1/4 as wide as protibia (or as wide as antennal scape), meso- and metatarsi still narrower; claws nearly 1/2 as long as tarsomere 5.

Aedeagus heavily sclerotized.

*Female.* Differs from male in somewhat longer elytra (completely concealing abdominal apex) and narrower tarsi. Ovipositor moderately sclerotized.

*Variations.* Length 2.2–2.7, width 1.1–1.3 mm. The coloration is varying: one paratype with reddish humeral spot expanding along entire elytral base; another paratype with completely reddish pronotum and elytral base, but its elytra in distal 5/6 are rather dark (almost blackish, similar to the metasternum and ventrite 1); one paratype is completely yellowish-reddish. Some small variability is observed also in the puncturation, and interspaces between punctures occasionally are more or less alutaceous. Finally, some paratypes have slightly expressed longitudinal rows of larger and sparser punctures on the elytra.

*Material.* Holotype (FMNH): ♂, and 1 paratype (ZIN), ♂, “New Zealand: S. Island, 13 km NW Takara, Washbourn Res., 10 m, 19-V-1982”, “FMHD #82-588, beech log, litter, S. Peck”. Paratypes. 1 ♂ (FMNH), “New Zealand: S. Island, R. Cobb Dam, Asbestos For. Walk. 410 m, 2-1-1985”, “FMHD #85-410, *Nothofagus-podo-hdwd*.”



**Figs 30–40.** Cyllodini. *Ceryllodes dacnoides* gen. et sp. n. 30 – body outline, dorsally; 31 – antennal club; 32 – prosternal process, ventrally; 33 – protibia, dorsally; 34 – mesotibia, dorsally; 35 – anal sclerite and spiculum gastrale, ventrally; 36 – tegmen, ventrally; 37 – ibid., laterally; 38 – penis trunk, dorsally; 39 – armature of inner sac of penis; 40 – ovipositor, ventrally. Scales: A – to Fig. 30; B – to Figs 31–34; C – to Figs 35–40.

for., log & leaf litter, #727, A. Newton & M. Thayer"; 4 ♂ (NZAC, ZIN) and 1 ♀ (NZAC), "N. ZEAL.: S. Isl., 300 m, Pigeon Saddle, 20 km NE Takake, Tasman NP, 21 May 1982, 832-11, S. & J. Peck, mixed forest litter"; 1 ♂ (NZAC), "Little Canaan, Takake Hill, 2600', 27.ii.67, J.F. Townsend"; 1 ♂ (NZAC), "Fraser Stm., S. Paturau, N.W. Nelson", "22 Aug. 67, F. Alack".

*Etymology.* The epithet of this species is formed from the generic name "*Dacne*" (Erotylidae) and "ides" from the Greek "eidos" (appearance, aspect, prototype, image).

### Taxonomic notes

Cyllodini Everts, 1898. Type genus *Cyllodes* Erichson, 1843.

= Strongyliini Erichson, 1842 (Strongyliinae). Type genus *Strongylus* Herbst, 1792, non Müller, 1780.

= Amborotubini Leschen & Carlton, 2004, **syn. n.** Type genus *Amborotubus* Leschen & Carlton, 2004.

The new synonymy was ascertained following the study of the type material of *Amborotubus clarkei* Leschen & Carlton, 2004. The genus *Amborotubus* should be treated as a specialized member of the Cyllodini with some peculiar characters, namely: subcylindrical body, rather declined ventrally head, incomplete elytra with subtruncate apices, short maxillary and labial palpi partly concealed under mentum, rather widened femora and tibiae, and shortened tarsi able to be concealed in excavations of the tibial apices and with reduced lobes of tarsomeres. Many of these characters are analogous in Lawrenceosini and suggest a myrmecophilous mode of life with some probable level of inquiline activity, not simply "mycophagous habits" as supposed by the authors. This species seems to be associated with fungi growing in nests of ants. The myrmecophilous characters (see the diagnosis of the new genus) allow this genus to be placed into an isolated position in the tribe and, perhaps, meriting a separate subtribe.

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This paper is dedicated to the 75th birthday of Gleb Sergeevich Medvedev.

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