

AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

McKeown, Keith C., 1937. Notes on Australian Cerambycidae. II. Notes on the genus *Syllitus*, with descriptions of new species. *Records of the Australian Museum* 20(2): 108–116, plates xviii–xix. [27 August 1937].

doi:10.3853/j.0067-1975.20.1937.253

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture **discover**

Australian Museum science is freely accessible online at
www.australianmuseum.net.au/publications/
6 College Street, Sydney NSW 2010, Australia



NOTES ON AUSTRALIAN CERAMBYCIDAE.

II.

Notes on the Genus *Syllitus*, with Descriptions of New Species.

By

KEITH C. McKEOWN,

Assistant Entomologist, The Australian Museum.

(Plates xviii-xix.)

The genus *Syllitus* forms a small but extremely interesting group of the Cerambycidae, which on account of the small size and dull coloration of its members appears to be generally overlooked and neglected by collectors, and there is little doubt that systematic collecting would add considerably to the number of known species.

Although the insects are mostly of small size and sombre coloration when viewed with the naked eye, a microscopic examination reveals them to be of considerable beauty, diverse in the arrangement of the raised costae and the sculpture of the elytra.

The genus *Syllitus* was founded by Pascoe in 1858 (*Trans. Ent. Soc. Lond.* (N.S.), v, p. 24) for the reception of *Stenoderus grammicus*, *S. deustus*, and *S. rectus*, all of which had been described by Newman. Pascoe considered that these species were "so different, yet so closely allied to each other, that their separation as a distinct group is advisable. I propose for it, therefore, the name of *Syllitus*; technically it may be at once distinguished from *Stenoderus* by its large oblong entire eyes." Later, in 1862 (*Journ. Ent.*, i, 5, April, 1862, p. 366), he amplified this diagnostic character, and stated that: "I proposed to separate, under the name of *Syllitus*, those species of *Stenoderus* with elevated longitudinal lines on the elytra, from the ordinary red and black ones which constituted the genus originally." Further, in 1864 (*Trans. Ent. Soc. Lond.*, iii (3), 1864-69, p. 554-5), he added that, with one exception—*S. albipennis*, from Morty—the eyes were "coarsely granulate", a character which holds good for the known Australian species.

The affinities of *Stenoderus* and *Syllitus* are undoubtedly very close, and their separation is somewhat arbitrary, as is the case with other Cerambycid genera, yet they fall into two convenient and recognizable groups, so that the distinction may be permitted to remain on the ground of expediency and the lack of more satisfactory generic characters upon which the separation could be based.

Species.

The genus *Syllitus* included seventeen species, a number which the present paper increases to twenty-three, viz.:

Genus *Syllitus* Pascoe, 1858.

- | | |
|--------------------------------------|--|
| <i>bipunctatus</i> Waterhouse, 1877. | <i>acanthias</i> , sp. nov. |
| <i>deustus</i> (Newman), 1841. | <i>divergens</i> , sp. nov. |
| <i>fulvipennis</i> Gahan, 1893. | <i>froggatti</i> , sp. nov. |
| <i>grammicus</i> (Newman), 1840. | <i>minutus</i> sp. nov. |
| <i>heros</i> Blackburn, 1900. | <i>sinuatus</i> , sp. nov. |
| <i>microps</i> Blackburn, 1900. | <i>adonarensis</i> Jordan, 1894. |
| <i>parryi</i> Pascoe, 1862. | <i>albipennis</i> Pascoe, 1864. |
| <i>rectus</i> (Newman), 1841. | <i>papuanus</i> Gestro, 1875. |
| <i>tabidus</i> Pascoe, 1862. | <i>spinosus</i> Gahan, 1915. |
| <i>terminatus</i> Pascoe, 1871. | <i>cylindricus</i> Germain, 1899. |
| <i>uniformis</i> Blackburn, 1893. | <i>pseudocupes</i> Fairmaire and Germar, 1864. |
| <i>argillaceus</i> , sp. nov. | |

Geographical Distribution.

Syllitus is typically Australasian in distribution, having a wide range throughout Australia and Tasmania, and extending to Papua and Adonara, near Timor. Two species, however, *S. cylindricus* and *pseudocupes*, have been recorded from Chile, a remarkable and unaccountable divergence in the distribution of a homogeneous group, entirely inconsistent not only with that of *Syllitus*, but with that of all its allied genera which form the Tropoclymmatini of Aurivillius (Junk: *Col. Cat.*, pars. 39, 1912). I cannot, therefore, admit these two species as *Syllitus*, and a re-examination is desirable with a view to fixing their true position. Within Australia the distribution of the individual species appears to be wide, few of them having a restricted range. From an examination of material in the Australian and Macleay Museums, Sydney, and the South Australian Museum, it may be concluded that *S. bipunctatus* is restricted to north-west Australia, *fulvipennis* to north-west Australia and Queensland, *tabidus* to Western Australia, and *terminatus* to north and north-west Australia; the other species are dispersed to a greater or less degree over the continent, and occur in a number of States.

Further information regarding distribution will be found in connection with the discussion of the individual species. Further systematic collection is necessary to determine the range of the species more exactly.

With the exception of a fine coloured figure of *Syllitus rectus* Newm., in Lacordaire's "Histoire Naturelle des Insectes: Genera des Coleoptères" (*Atlas*, t. 88, fig. 4), and a very indifferent coloured figure of *S. gramicus* given by Blanchard (Voy. Pole Sud., *Atlas*, t. 17, fig. 19), none of the Australian species of *Syllitus* has been figured. It has been considered advisable, therefore, to figure all the described species of the genus known to me, in addition to the new forms described in the present paper, in the hope that they will be useful to workers upon the group and aid in obviating the confusion which exists in some collections with regard to several of the species.

Key to Australian Species of *Syllitus*.

- | | |
|---|---|
| 1. Costae concolorous with elytra | 4 |
| Costae contrasting with elytra | 2 |
| Elytra blotched or mottled | 3 |
| 2. 1st and 2nd costae parallel | 7 |
| 1st and 2nd costae divergent | 9 |

3. Apex of elytra spined	<i>acanthias</i>
Apex of elytra not spined	<i>sinuatus</i>
4. Apex of elytra black	<i>terminatus</i>
Apex of elytra concolorous	5
5. Lateral margin straight	6
Lateral margin curved	<i>minutus</i>
6. Costae parallel	<i>uniformis</i>
Costae divergent	<i>argillaceus</i>
7. Suture white	13
Suture concolorous	8
8. 1st costa longer than 2nd	<i>rectus</i>
1st costa shorter than 2nd	<i>microps</i>
9. White spot at point of divergence	<i>bipunctatus</i>
Without white spot at point of divergence	10
10. Costae united at apex	14
Costae not united at apex	11
11. Costae of same length	<i>divergens</i>
Costae of unequal length	12
12. 1st costa longer than 2nd	(wanting)
1st costa shorter than 2nd	16
13. Two discal costae	<i>deustus</i>
Four discal costae	<i>heros</i>
14. 2nd costa united (or almost) to suture	<i>tabidus</i>
1st and 2nd costae united at apex	15
15. Three discal costae	<i>froggatti</i>
Three discal costae and margin	<i>parryi</i>
16. 1st costa slightly deflected to suture	<i>fulvipennis</i>
1st costa strongly deflected to suture	<i>grammicus</i>

***Syllitus bipunctatus* Waterhouse, 1877.**

(Pl. xviii, fig. 3.)

Syllitus bipunctatus Waterhouse, Ent. Mo. Mag., xiv, 1877, p. 73.

Although this species is usually very easily identified and separated from any of the more closely allied forms, there are several specimens in the Australian Museum collection in which the white spot within the diverging costae is elongated into a white or cream line of a somewhat transparent nature, and which differ somewhat in other features, but, until further material is available for study, it is not advisable to make a definite decision as to their identity. It is possible that this is the form described as "*Syllitus* sp.?" by Gahan in 1893 (*Trans. Ent. Soc. Lond.*, p. 185) from Roebuck Bay.

The specimens of *S. bipunctatus* in the collection of the Australian Museum are from north-west Australia. The type locality is Queensland.

***Syllitus deustus* (Newman), 1841.**

Stenoderus deustus Newman, Entomologist, i, April, 1841, p. 95.

This species, which is described as being of small size— $\frac{3}{10}$ inch in length—and having both the suture and the lateral margin white, in addition to the two discal and the humeral costae whitish, and the prothorax fuscous and definitely not ferruginous, is unknown to me. It was apparently unknown also to Blackburn, who suggested that it might possibly be a variety of *rectus*. Several specimens in the Macleay and South Australian Museums are labelled as *deustus*, but in no instance did they fit Newman's description, and in all there was no indication of the white sutural line, which would appear to be a distinctive character of the species.

The type locality for *S. deustus* is vaguely stated by Newman to be "New Holland".

***Syllitus fulvipennis* Gahan, 1893.**

(Pl. xix, fig. 7.)

Syllitus fulvipennis Gahan, Trans. Ent. Soc. Lond., 1893, p. 184.

S. fulvipennis, although close to *S. grammicus*, appears to be a good species; in addition to the characters given in Gahan's description, the puncturation of the elytra appears to be finer than in the latter species.

Specimens in the Australian and Macleay Museums are from Queensland and north-west Australia respectively. Type locality is Cassini, West Australia.

***Syllitus grammicus* (Newman), 1840.**

(Pl. xviii, fig. 7.)

Stenoderus grammicus Newman, Ann. Mag. Nat. Hist., v, 1840, p. 21.

Considerable confusion appears to exist in both museum and private collections between this species and *S. rectus*, and in almost all the material examined both species were mixed under either name, in spite of the fact that these insects are amongst the most easily distinguished members of the genus. Newman's description, although very brief, is clear, and the characters mentioned by him are sufficiently distinctive to ensure their separation being reasonably simple, and the diagnosis agrees closely with the specimens examined. The inner costa, somewhat towards the middle of its length, is deflected towards the line of the suture, while the outer costa bends towards the lateral margin. The inner costa is shorter than the second. The humeral costa is almost concolorous with the elytra, and throughout the greater part of its length lies close to the second white costa. There is little variation in the large series of specimens examined.

This species appears to have a very wide distribution throughout Australia, and specimens in the Australian Museum are from New South Wales, Tasmania, South Australia, Kangaroo Island, and Queensland, while the South Australian Museum has material from North Australia. I have seen specimens from Victoria in private collections. The type locality is Adelaide, South Australia.

***Syllitus heros* Blackburn, 1900.**

(Pl. xviii, fig. 5.)

Syllitus heros Blackburn, Proc. Roy. Soc. Vic., xii, 2, April, 1900, p. 231.

The large size together with the numerous white costae serves to distinguish this species from the closest of its congeners, *S. parryi*, each elytron bearing four costae, as well as white sutural and lateral lines.

The Australian Museum collection contains material from South Australia; the South Australian Museum from South Australia and Queensland; and the Macleay Museum from South and West Australia. The type locality is Quorn, South Australia.

***Syllitus microps* Blackburn, 1900.**

(Pl. xviii, fig. 1.)

Syllitus microps Blackburn, Proc. Roy. Soc. Vic., xii, 2, April, 1900, p. 232.

From Blackburn's description, I was at first inclined to consider this species as a small variety of *S. rectus*, but a comparison of a paratype with a very large

series of specimens has convinced me that the specific characters as given are constant, and, although the small eye is not usually a satisfactory factor, once the species has been identified, its separation from its larger congener is comparatively simple. It must be remarked, however, that, working from the description alone, it is difficult to determine such points as "smallness" of eye, etc., yet no other characters present themselves which can be considered useful in aiding identification.

New South Wales, Queensland, and South Australia are represented in the Australian Museum collection; South Australia, Queensland, and Tasmania in the South Australian Museum. Blackburn gives as localities South Australia, Victoria, and Tasmania.

Syllitus parryi Pascoe, 1862.

(Pl. xviii, fig. 8.)

Syllitus parryi Pascoe, Journ. Ent., i, 5, April, 1862, p. 366.

This large and distinct species is represented by specimens from South Australia in the Australian, Macleay, and South Australian Museums; and New South Wales in the South Australian Museum. The type locality is given as "Australia".

Syllitus rectus (Newman), 1841.

(Pl. xviii, fig. 6.)

Stenoderus rectus Newman, Entomologist, i, April, 1841, p. 95.

This species has unaccountably been confused with *S. grammicus* in many collections, and the same error occurs in Gemminger and Harold's "Catalogus Coleopterorum" (1872), where it is listed as a variety of that species; it is, however, one of the most distinct species of the genus. Its dark brown elytra, each marked with three parallel white costae, of which the second is not as long as the first, render it unmistakable, especially when taken in conjunction with its comparatively large size and robust form.

Its range throughout Australia is wide; the only State from which I have not seen specimens is West Australia, and it is probable that further collecting will reveal its presence in that area. The Australian Museum contains specimens from New South Wales, South Australia, and Queensland; these States are also represented in the South Australian Museum, with the addition of Victoria and Tasmania; those in the Macleay Museum are from Tasmania and North Queensland. The type locality is given by Newman as "New Holland", but Gahan (*Trans. Ent. Soc. Lond.*, 1893, p. 183) states that the type came from South Australia (Davis).

Syllitus tabidus Pascoe, 1871.

(Pl. xix, fig. 3.)

Syllitus tabidus Pascoe, Ann. Mag. Nat. Hist., viii (4), 1871, p. 271.

A slender species of a general stramineous coloration, which appears to be confined to West Australia, the specimens in the Macleay and Australian Museums coming from this locality. Although the ground colour of the elytra in the majority of specimens is consistently pale, a few show a tendency to a slight brownish tint at the apex of the elytra.

The type locality is Nicol Bay, West Australia.

Syllitus terminatus Pascoe, 1871.

(Pl. xviii, fig. 2.)

Syllitus terminatus Pascoe, Ann. Mag. Nat. Hist., viii (4), 1871, p. 271.

This is a very distinct species, remarkable for the black terminal area of the otherwise yellowish elytra, a character which renders it quite unmistakable. The coloration of *S. terminatus* is a quite remarkable deviation from that so consistent throughout the other members of the genus.

Specimens from north-west Australia are in the collections of the Australian, Macleay, and South Australian Museums, and the latter institution also has material from North Australia. The type locality of the species is Nicol Bay, West Australia.

Syllitus uniformis Blackburn, 1893.

(Pl. xviii, fig. 4.)

Syllitus uniformis Blackburn, Trans. Roy. Soc. S. Aust., xvi, 2, June, 1893, p. 197.

This small concolorous species is easily distinguished from its allies by the dark ferruginous colour and the absence of white on the raised elytral costae. *S. minutus*, sp. nov., is close to this species, but is readily separated by the curved lateral margin of the elytra and other characters.

S. uniformis is widely distributed throughout Australia, being represented in the Australian Museum collection from New South Wales and Queensland; in the South Australian Museum from New South Wales, South Australia, and Central Australia. The type locality is Fraser Range, Central Australia. Blackburn also states that he has the species from South Australia.

Syllitus argillaceus, sp. nov.

(Pl. xix, fig. 8.)

Robust: Head and prothorax bright ferruginous. Elytra clay-coloured (Ridgeway, pl. xxix), finely punctate, with suture, three narrow raised costae and lateral margin concolorous; 1st costa approximately parallel to suture, approaching it slightly about midway, 2nd costa diverging in a wide curve for about one-third of its length; 1st costa slightly shorter than 2nd; both costae curving inwards and touching the suture near apex of elytra; humeral costa almost straight, parallel to lateral margin. Elytra tapering, apices divergent and narrowly rounded. Antennae almost reaching extremity of elytra, bright ferruginous. Legs bright ferruginous. Ventral surface ferruginous with a slight greyish pubescence.

Length, 12 mm.

Loc.—Forest Reefs, New South Wales (A. M. Lea).

Holotype in South Australian Museum.

This is the only species of *Syllitus* known to me in which all the elytral costae are concolorous with the elytra, with the exception of *S. uniformis* Blkb., in which the costae are straight, but from this the present species is readily separated by its larger size and more robust form, divergent costae, pale colour, and the much finer sculpture of the elytra.

Syllitus acanthias, sp. nov.

(Pl. xix, figs. 5 and 5a.)

Robust: Head and prothorax dull ochraceous, nitid, sparsely and finely punctate. Elytra light brown, with a distinct pale yellowish-white lateral patch

on the basal third extending from just before the second costa to the lateral margin; a clearly-defined patch of similar colour extending from midway between the second and the first costa to the suture; these and other small light areas give the insect a somewhat mottled appearance; 1st and 2nd costae parallel, creamy white; 1st costa longer than 2nd, 3rd concolorous with elytra. The apex of each elytron is produced into a single acute but stout spine. Scutellum dark brown, sparsely clothed with a coarse pubescence. Antennae longer than body, dull ochraceous, finely punctate, and covered with a fine golden pubescence; scape of antennae darker and browner with larger and coarser punctures, and the pubescence more sparse than on the rest of the antenna. Legs brown. Ventral surface bright brown, sparsely clothed with a fine grey pubescence.

Length, 14.5 mm.

Loc.—Moa (Banks Island), Torres Strait (W. McLennan); 4 specimens.

Holotype in Australian Museum.

This insect is not only the largest and most robust, but also quite the most striking member of the genus known to me, being even larger and stouter than *S. heros* Blkb. The stout terminal spine of the elytra is also present in *S. albipennis* Pasc., described from Morty, but the present species differs considerably from this not only with regard to its large size and its coloration, but in other respects. *S. albipennis* is known to me only from Pascoe's description (*Trans. Ent. Soc. Lond.*, iii (3), 1864, p. 555).

Syllitus divergens, sp. nov.

(Pl. xix, fig. 6.)

Slender: Head and prothorax brown, rugose, and sparsely punctate. Elytra dark brown, coarsely pitted with large punctures; suture pale stramineous—almost white; 1st and 2nd costae dull white, 3rd concolorous with elytra, lateral margin white; 1st and 2nd costae parallel for about one-third of their length, when they diverge widely and abruptly near the centre of the elytra, then converging again gradually towards the apex. First costa almost reaches the suture at the point of widest divergence, 2nd nearly reaching 3rd; 1st and 2nd costae practically equal in length, but 1st very slightly longer than 2nd. The area bounded by 1st and 2nd costae is much darker in colour than the rest of the elytra; in some specimens almost black. Antennae shorter than body, brown, concolorous, clothed with a sparse, fine, whitish pubescence. Ventral surface brown, densely clothed with fine grey pubescence.

Length, 9 mm.

Loc.—Moa (Banks Island), Torres Strait (W. McLennan); 4 specimens.

Holotype in Australian Museum.

This small and dark species is readily distinguished from others by the very abrupt and wide divergence of the first two elytral costae, and by the almost complete absence of lateral tubercles on the thorax, the sides of which are almost parallel and very slightly rounded.

Syllitus froggatti, sp. nov.

(Pl. xix, fig. 2.)

Relatively stout: Head and prothorax ferruginous. Antennae not reaching extremity of body, ferruginous. Elytra rich dark brown, coarsely punctate, suture narrowly margined with a fine line of stramineous; 1st and 2nd costae compara-

tively broad, clearly defined, white bordered on both sides with pale stramineous; costae 1 and 2 equal in length, meeting and coalescing at apex so that the elytral area bounded by them is completely closed; 1st costa nearly parallel to the suture, but approaching it almost imperceptibly towards the centre; 2nd costa slightly divergent near centre; humeral costa shorter than 1 and 2, somewhat broadly whitish near its base, but becoming dull stramineous over the latter three-quarters of its length; marginal costa white, comparatively broad and well defined. Scutellum pale ochraceous, broadly rounded. Ventral surface concolorous with ground colour of elytra, slightly pubescent. Legs ferruginous, with short scattered pubescence.

Length, 9 mm.

Loc.—Merriwa, New South Wales (W. W. Froggatt), 15 Nov., 1902; one specimen. Wattle Flat, near Bathurst, New South Wales (W. W. Froggatt); one specimen.

Holotype (Merriwa) in Australian Museum.

This species is readily distinguished from any other known to me by the costae of equal length coalescing at the apex of the elytra, and the stramineous edging to costae 1 and 2.

Syllitus minutus, sp. nov.

(Pl. xix, fig. 1.)

Slender: Head and prothorax pale ferruginous, rugose; head relatively broad. Antennae not reaching apices of elytra, pale ferruginous. Elytra clay-coloured, coarsely punctate at base and apex, finely on median area, with three concolorous raised costae; 1st and 2nd costae widely separated; 1st costa close to and almost parallel with suture, approaching it slightly towards the middle of its length; 2nd costa diverging gradually throughout the greater part of its length, and approaching costa 3, which runs nearly parallel to it; lateral margin with a marked inward curve towards its centre, where it closely approaches costa 3. Legs uniformly pale ferruginous. Ventral surface: sternum pale ferruginous; abdomen black, becoming dark ferruginous towards its extremity.

Length, 5 mm.

Loc.—Cairns, North Queensland (F. P. Dodd).

Holotype in South Australian Museum.

This is the smallest species of *Syllitus* known to me, being only 1/5 inch in length. It is very distinct from its allies, and may be distinguished by its widely separated and slightly diverging concolorous elytral costae, and by the curved lateral margin of the elytra.

Syllitus sinuatus, sp. nov.

(Pl. xix, fig. 4, 4a.)

Slender: Head and prothorax nitid, ochraceous, with a broad median brownish-black stripe extending from the apex of the head to the base of the prothorax. Elytra coarsely punctate, yellowish-white, with a very dark brown—almost black—sinuate stripe extending from the humerus to the apex; 1st and 2nd costae parallel, cream; 1st considerably longer than 2nd, 3rd concolorous with elytra; apex of elytra acutely rounded, slightly divergent. Scutellum brown, coarsely punctate, with a slight pubescence. Antennae as long as, or very slightly longer than, body, bright ochraceous, sparsely and finely punctate with coarse and widely

scattered sparse hairs. Legs ferruginous, clothed with a dense, fine, white pubescence, concentrated and forming large patches on the lower surface and outer sides of the coxae. Ventral surface pale ochraceous; sternum densely, and abdomen sparsely, clothed with fine white pubescence.

Length, 10 mm.

Loc.—Cairns, North Queensland, three specimens: Moa (Banks Island), Torres Strait (W. McLennan), one specimen; Coen district, Cape York (H. Hacker), two specimens.

Holotype (Cairns) in Australian Museum.

This species bears a superficial resemblance to *S. acanthias*, sp. nov., but it is smaller, and is readily distinguished by the presence of the dark thoracic stripe, the regular sinuate band upon the elytra, and the dense white pubescence upon the coxae, together with the complete absence of the apical spine on the elytra. The coloration is very consistent throughout the series, with the exception of the single specimen from Moa (Banks Island), which is much darker than those from North Queensland.

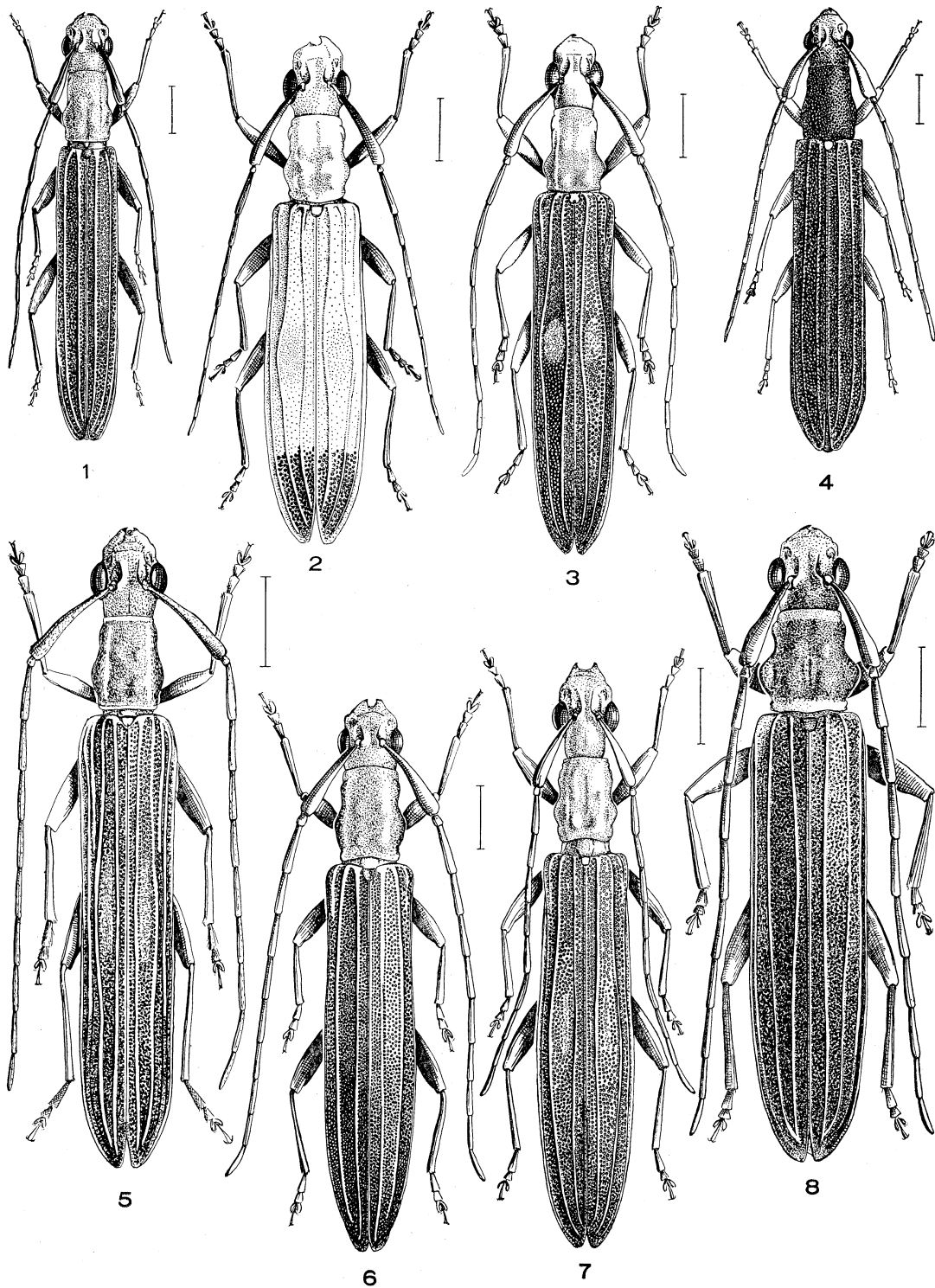
EXPLANATION OF PLATES.

PLATE XVIII.

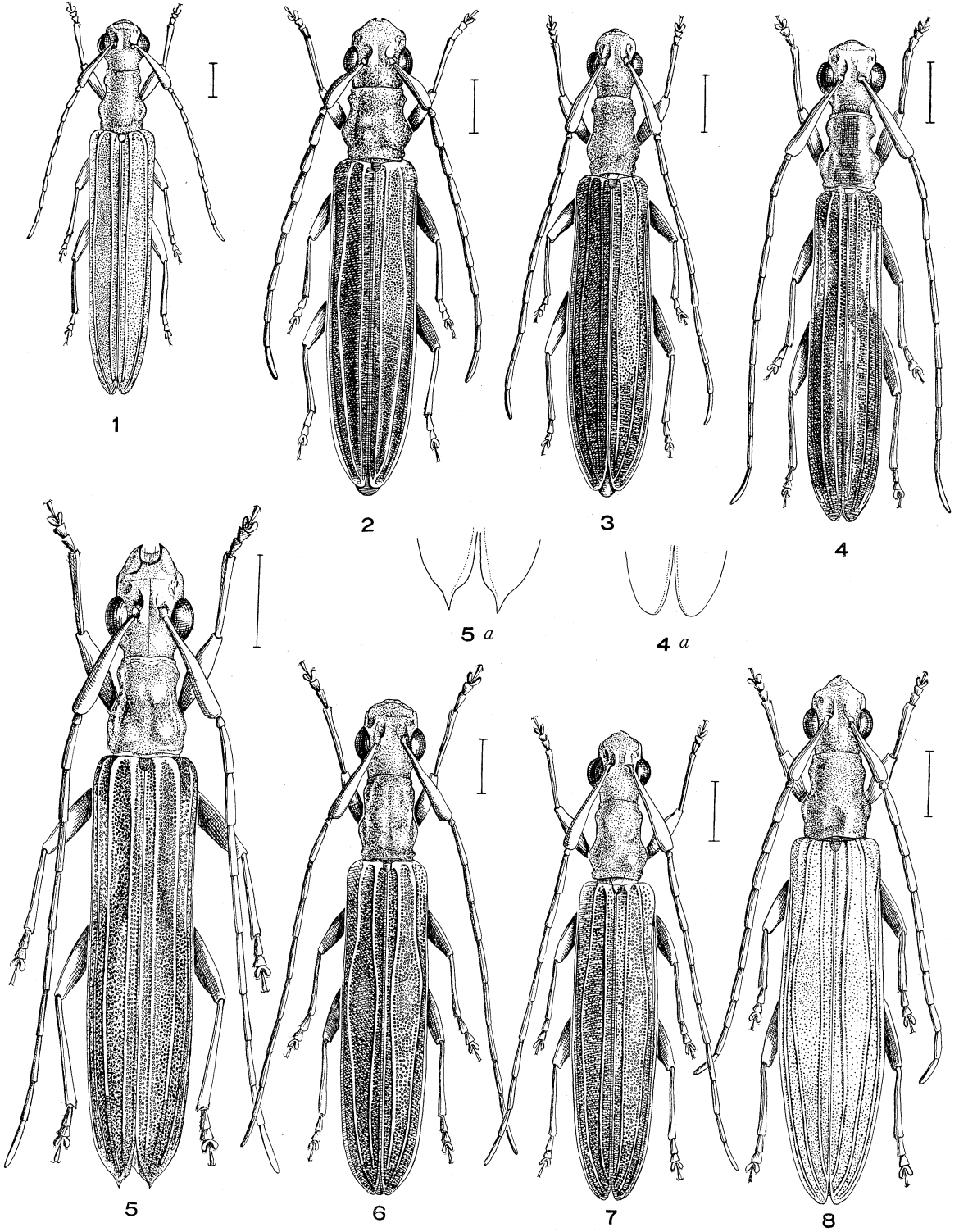
- Fig. 1. *Syllitus microps* Blackburn.
 Fig. 2. " *terminatus* Pascoe.
 Fig. 3. " *bipunctatus* Waterhouse.
 Fig. 4. " *uniformis* Blackburn.
 Fig. 5. " *heros* Blackburn.
 Fig. 6. " *rectus* (Newman).
 Fig. 7. " *grammicus* (Newman).
 Fig. 8. " *parryi* Pascoe.

PLATE XIX.

- Fig. 1. *Syllitus minutus*, sp. nov.
 Fig. 2. " *froggatti*, sp. nov.
 Fig. 3. " *tabidus* Pascoe.
 Fig. 4. " *sinuatus*, sp. nov.
 Fig. 4a. " " Apex of elytra.
 Fig. 5. " *acanthias*, sp. nov.
 Fig. 5a. " " Apex of elytra.
 Fig. 6. " *divergens*, sp. nov.
 Fig. 7. " *fulvipennis* Gahan.
 Fig. 8. " *argillaceus*, sp. nov.



NANCY B. ADAMS, *del.*



NANCY B. ADAMS, *del.*