A NEW SPECIES OF *URACANTHUS* (COLEOPTERA: CERAMBYCIDAE): A PEST ON ORNAMENTAL CYPRESSES IN THE ADELAIDE REGION

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Summary

RONDONUWU, S. A. & AUSTIN, A. D. (1988) A new species of *Uracanthus* (Coleoptera: Cerambycidae): a pest on ornamental cypresses in the Adelaide Region. *Trans. R. Soc. S. Aust.* 112(00), 109-117, 30 November, 1988.

A new species of cerambycid beetle from South Australia is described, based on both sexes of the adult and all immature stages. *Uracanthus cupressianus* sp. nov. causes damage to cypresses, *Cupressus* spp., planted as ornamental trees in parks and gardens around Adelaide. Notes on *Uracanthus* are provided, and the relationships and biology of *U. cupressianus* sp. nov. are discussed.

KEY WORDS: Coleoptera, Cerambycidae, *Uracanthus cupressianus* sp. nov., *Cupressus* spp.

Introduction

In Australia the Family Cerambycidae is represented by almost 1000 described species (McKeown 1947), many of which have been recorded as causing damage to native trees grown for timber, wind-breaks or as ornamentals. However, the taxonomy of the family in this country has received virtually no attention in the last 30 years, even though the group is of significant importance to the ecology of trees and shrubs in natural habitats and in commercial situations (Linsley 1959).

Recently one of us (SAR) completed an extensive project on the biology and ecology of a species of *Uracanthus* which causes substantial damage to ornamental cypresses, particularly *Cupressus sempervirens* L. (Cupressaceae) in the Adelaide region. The members of this Australian genus were described prior to 1950 and are dealt with in the works of Lea (1916, 1917), McKeown (1938, 1940, 1942, 1947, 1948) and Duffy (1963). The only key to species is that presented in Lea (1916), which covers 22 of the 37 known species. In this work our species runs to either *U. acutus* Blackburn or *U. discicollis* Lea, but is quite different from these species in a number of characters (see below). To ensure that we had an undescribed species we borrowed all available holotypes, and examined the *Uracanthus* holdings in the South Australian Museum, Australian National Insect Collection and the Waite Institute Insect Collection (see Table 1). Our comparisons using this material showed that the species we had reared from branches of *C. sempervirens* in the Adelaide region was substantially different in many important characters to all other species and, accordingly, should be considered as new.

In this paper we describe the species, discuss its intrageneric relationships, and provide brief notes on its biology. A detailed account of the ecology, behaviour and interaction with the main host tree will be presented elsewhere. Although we examined other species in the genus (Table 1), we cannot provide a comprehensive key because of unresolved intraspecific variability in some taxa. However, we indicate where these problems lie and what characters may prove useful in resolving them.

Methods

Larval stages were obtained from infested twigs of *C. sempervirens* collected from Adelaide suburbs during 1986. They were either fixed and preserved in 80% alcohol or reared through to adults in the laboratory. Male genitalia and cuticular structures from larvae were dissected out, soaked in 10% KOH (4-6 hrs), placed in 10% acetic acid (15 mins), dehydrated, and either permanently mounted on slides in Berlese's fluid or temporarily mounted in glycerol. Adult reproductive systems were drawn from freshly killed specimens dissected under Ringer's solution. Descriptions of the larval stages were compiled from freshly killed specimens examined under 80% alcohol, except for sculpturing and pilosity characters which were examined by firstly drying specimens on filter paper.

The morphological terms used follow Duffy (1953, 1957, 1960, 1963), Torre-Bueno (1962), Eady (1968) and Harris (1979). Abbreviations for institutions are: ANIC, Australian National Insect Collection, CSIRO, Canberra; AM, Australian Museum, Sydney; BMNH, British Museum (Natural History), London; MV, Museum of Victoria, Melbourne; NRS, Natural History Museum, Stockholm; SAM, South Australian Museum, Adelaide; HMO, Hope Museum, Oxford;

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WAM, Western Australian Museum, Perth; WARI, Waite Agricultural Research Institute, Adelaide.

Genus *Uracanthus* Hope

A complete bibliography to the genus is provided by McKeown (1947).

Comments

The Australian Uracanthini is in urgent need of revision. There are seven genera, none of which is well characterized; the most recent works by Lea, McKeown only provide descriptions of new species. A key to some genera is given by Lea (1916) and a more extensive generic key is presented by Rondonuwu (1988[1]). *Uracanthus* is closest to *Scolecobrothus* Hope, differing only in the latter having 12-segmented antennae, segments 11 and 12 fully articulated, and the distal nine segments dentate or serrate along one side. In *Uracanthus* the antennae are 11-segmented. Segment 11 is sometimes divided by a suture but the two parts are never articulated, and the distal nine segments are cylindrical or subcylindrical.

We found a number of characters to be more variable than indicated in Lea's and McKeown's work, undoubtedly because they based their species' descriptions on very few specimens. Shape of elytral apices, surface sculpturing, pilosity and body size varied in many species and, although these characters will remain important in delimiting species, their range of variation will need to be documented in any future revisionary work. Characters we found useful at the species level were the structure of the male genitalia, the proximity of the eyes on the ventral head and the shape and length of the antennae. Such characters may help resolve the problem surrounding the *U. triangularis* Hope complex, which includes three varieties (Var. A, B and C) designated by Lea (1916) on the basis of differences in pilosity.

For nearly all known species of *Uracanthus* only descriptions of the adult stage are given, usually of the male. Duffy (1963) is the only author who has provided any information on immature stages, and then only for the final instar larva of three species, viz. *U. triangularis*, *U. cryptophagus* Olliff. and *U. pallens* Hope. We present here a description of all life-history stages for the new species and have used Duffy (1953, 1957, 1960, 1963) as a guide in trying to limit the description of non-adult stages to characters of specific value only.

[1]Rondonuwu, S. A. (1988) "Biology and Ecology of Cypress Twig Borer, *Uracanthus cupressiana* sp.n. (Cerambycidae)". Unpublished Ph.D Thesis, University of Adelaide.

Uracanthus cupressianus sp. nov.
FIGS 1-20

Holotype: ♂, SAM, Glenelg, South Australia, reared ex *Cupressus sempervirens*, 5.x.1986, S. Rondonuwu. Paratypes: adults - 27 ♂, 26 ♀, genitalia of 5 ♂ in glycerine capsules, same data as holotype except for some with different collecting dates; 3 ♂, 3 ♀, SAM; 21 ♂, 20 ♀, 5 ♂ genitalia preparations, WARI; 3 ♂, 3 ♀, ANIC.

Adult Male

Size (holotype). Length 13.8 mm, width across anterior part of elytra 3.1 mm (also see Table 2).

Colour. Generally reddish brown; head, proximal antennal segments, pronotum and femora usually darker than elytra; almost entire body covered with dense even pilosity of short hairs giving golden sheen appearance over surface.

Head. Lower face (from lower eye to tip of closed mandibles) about as long as wide, lateral margins converging ventrally only slightly; clypeus flat or slightly convex, sparsely punctate, sparsely pilose, dorsal margin triangular, bounded by deep sutures; medial impressed line deep and glabrous, extending posteriorly to point just behind eyes; antennal sockets raised well above surface of frons on high cone-like protuberances which are moderately narrow at apex; frons and dorsal parts of genae coarsely punctate but punctures mostly hidden by pilosity; lateral and ventral part of head mostly glabrous; lateral part sparsely punctate, ventral headpart with very coarse transverse striae; eyes coarsely facetted, broadly separated in ventral aspect by about half width of head (measured across posterior margin); antennae (Fig. 1) shorter than body, 11-segmented, sometimes segment 11 divided by feeble suture (i.e. appearing 2-segmented), segments 3-11 extremely narrow and elongate, evenly cylindrical, apex of segments 5-10 produced only slightly on outer side.

Thorax. Pronotum (Fig. 9) longer than width across posterior margin (5.0:4.3), posterior margin wider than anterior margin (4.3:3.3) so that in dorsal view lateral margins converge anteriorly; lateral pronotum with broadly pointed hump just posterior to midline; pronotum with two very broad longitudinal bands of dense pilosity dorsally and narrower pilose band above coxae, dorsomedial longitudinal line narrow to moderately broad and glabrous, lateral surface mostly glabrous, ventral surface sparsely and evenly pilose; dorsal and lateral part of pronotum with uneven transverse strigose-punctate sculpturing, mostly hidden by pilosity;

TABLE 1: *Species of* Uracanthus *known from Australia* (* = holotype examined; x = holotype missing; + = species known from South Australia)

Species	Holotype & depository	Depositories of other material examined
Uracanthus acutus Blackburn (*)	♂ BMNH	SAM, ANIC, WARI
U. albatus Lea (*)	♂ SAM	WARI, SAM
U. ater Lea (*)	♂ SAM	SAM, ANIC
U. bivitta Newman (*, +)	♀ BMNH	SAM, ANIC, WARI
U. corrugicollis Lea (*, +)	♂ SAM	SAM, ANIC
U. cryptophagus Ollif. (*)	♀ AM	SAM, ANIC
U. cupressianus sp.nov. (*, +)	♂ SAM	ANIC, WARI
U. dentiapicalis McKeown (*)	♂ WAM	—
U. discicollis Lea (*, +)	♂ SAM	SAM, ANIC, WARI
U. dubius Lea (*, +)	♂ SAM	SAM, ANIC
U. froggatti Blackburn (*)	♂ BMNH	SAM, ANIC
U. fuscocinereus White (*)	♀ BMNH	WARI, ANIC
U. fuscostriatus McKeown (*)	♂ WAM	ANIC
U. fuscus Lea (*, +)	♂ SAM	SAM, ANIC
U. gigas Lea (x)	♂ BMNH	SAM, ANIC
U. glabrilineatus Lea	♂ SAM	SAM
U. inermis Aurivillius (*)	♀ NRS	—
U. insignis Lea (*)	♀ SAM	SAM, ANIC
U. lateroalbus Lea (*)	♂ SAM	SAM, ANIC
U. leai McKeown (*)	♂ SAM	SAM
U. longicornis Lea (*)	♂ SAM	SAM
U. loranthi Lea (*)	♂ MV	SAM, ANIC
U. maleficus Lea (*)	♂ SAM	SAM, ANIC
U. marginellus Hope (*, +)	♂ HMO	SAM, ANIC
U. minatus Pascoe (*)	♀ BMNH	—
U. multilineatus McKeown (*)	♂ WAM	ANIC
U. pallens Hope (*)	♂ HMO	SAM, ANIC
U. parallelus Lea (*)	♂ MV	ANIC
U. parvus Lea (*)	♂ SAM	ANIC
U. pertenuis Lea (*, +)	♂ SAM	SAM, ANIC
U. regalis McKeown (*)	♂ AM	ANIC
U. simulans Pascoe (*, +)	♂ BMNH	SAM, ANIC
U. strigosus Pascoe (*, −)	♂ BMNH	SAM, ANIC
U. suturalis Lea	♂ SAM	SAM, ANIC
U. triangularis Hope	♀ HMO	SAM, ANIC, WARI
U. triangularis var. A Lea (*)	♂ SAM	SAM, ANIC
U. triangularis var. B Lea (*, +)	♂ SAM	SAM, ANIC
U. triangularis var. C Lea (*, +)	♀ SAM	SAM, ANIC
U. ropicus Lea (*)	♂ SAM	SAM, ANIC
U. ventralis Lea (*)	♂ SAM	SAM, ANIC

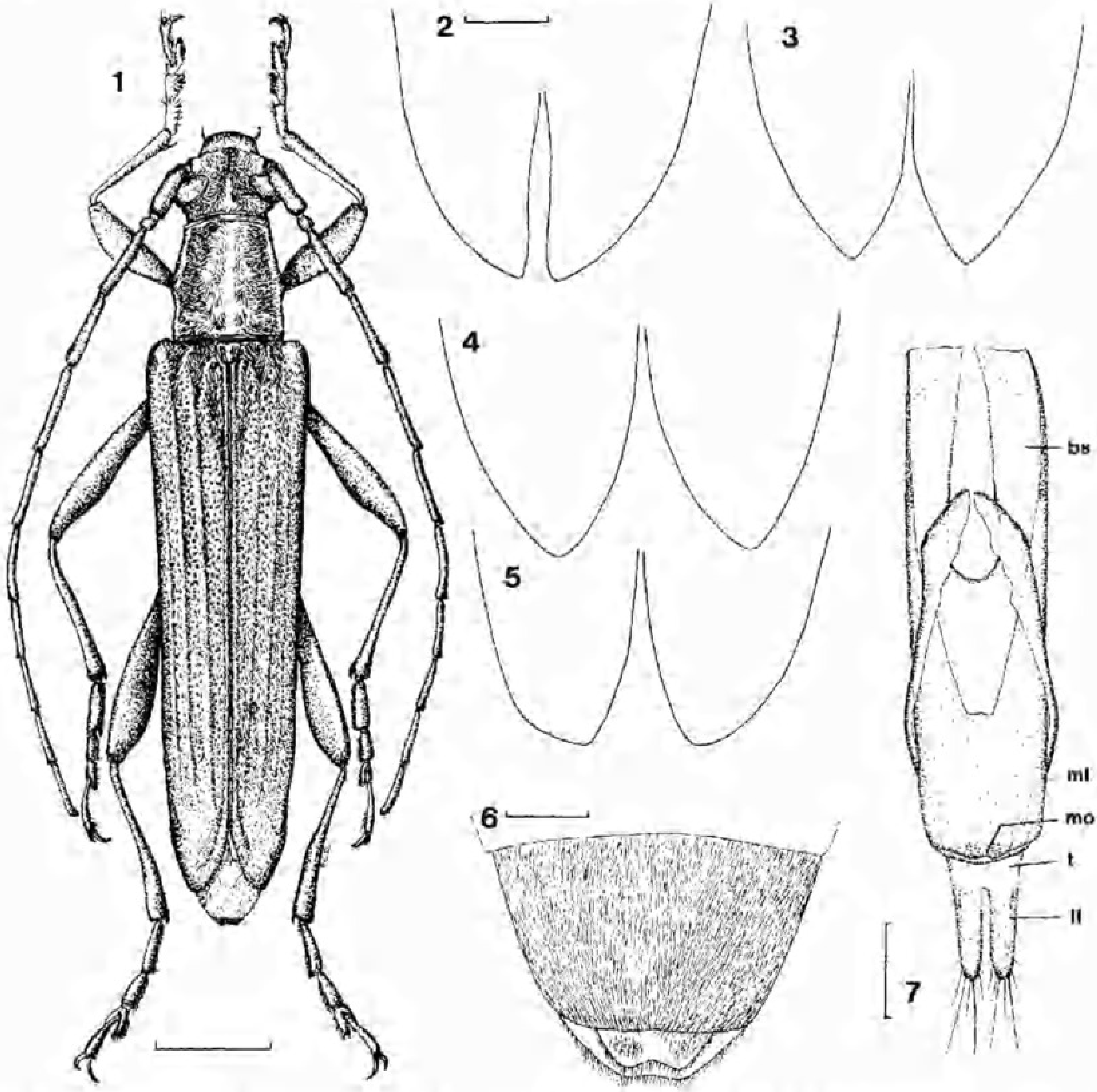
dorsal part of pronotum with one pair (sometimes two pairs) of small shallow glabrous depressions, dorsomedial longitudinal line slightly depressed; scutellum pointed posteriorly, smooth, virtually glabrous.

Elytra. Much wider than prothorax measured across anterior margin, width decreasing posteriorly; apices broadly pointed either symmetrically or asymmetrically (Figs 4, 5); anterior corners glabrous; surface of each elytron with four feeble raised longitudinal lines (Fig. 1), punctate all over but punctures partly hidden by dense even pilosity.

Legs. Moderately stout; femora expanded in distal two-thirds, widest approximately one-third from distal end, lateral surfaces transversely strigose-punctate and almost without pilosity; tibiae slightly bowed, hind tibiae more so than fore and mid tibiae; first segment of hind tarsus 1.54–1.56 times longer than second; first segment of fore and mid tarsi 1.5 times or less longer than second.

Abdomen. Ventral surface with uniform pilosity, moderately dense; S7 broadly truncate posteriorly, sometimes slightly emarginate medially; T7 broadly rounded posteriorly and slightly emarginate medially; T8 (if visible) much narrower than T7 and deeply emarginate medially (Fig. 6).

Genitalia and Reproductive System. Genitalia (Fig. 7) with lateral lobes of tegmen cylindrical, apices rounded with several short and several long setae; basal piece thin and folded but becoming flat and wider at tip; median lobe parallel-sided, becoming narrower at apex; lateral margin of median orifice

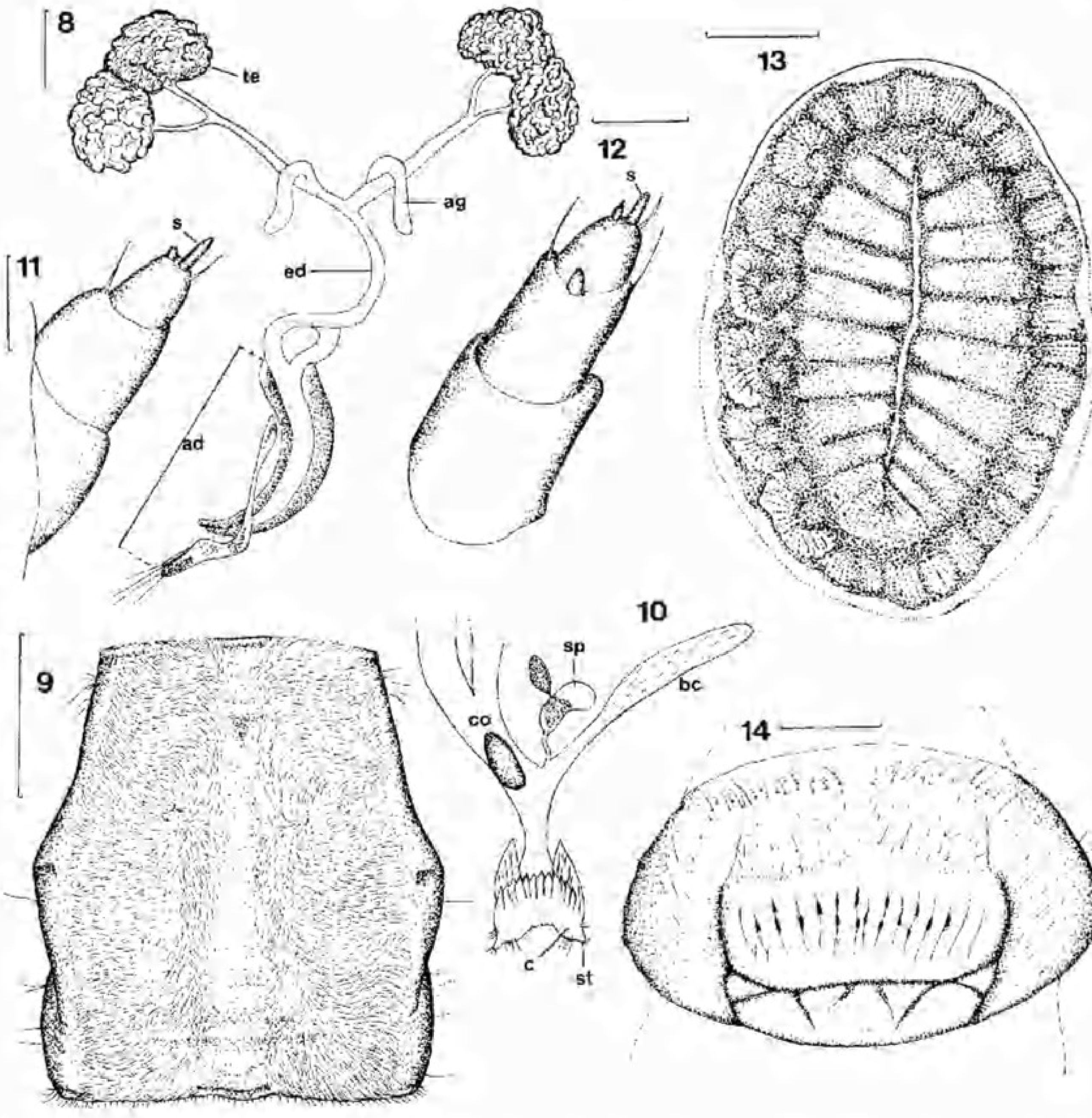


FIGS 1-7. *Uracanthus cupressianus* sp. nov. 1, adult male paratype; 2 and 3, adult female, paratypes, variation in the apices of the elytra; 4 and 5, adult male, paratypes, variation in the apices of the elytra; 6, adult male, paratype, distal segments of the abdomen, ventral view; 7, adult male genitalia (aedeagus), paratype. Scales: Fig. 1 – 2 mm; Figs 2–6 – 0.5 mm; Fig. 7 – 250 μm. bs – basal strut; ll = lateral lobe; ml = medial lobe; mo = medial orifice; t – tegmen.

narrowed apically, rounded, slightly notched medially; dorsal lobe as wide as ventral lobe; basal struts short and truncate anteriorly; internal sac with a knot behind aedeagus; arrangement of glands and ducts as in Fig. 8.

Adult Female

As for male except as follows:
Size. (see Table 2); pronotum slightly broader in posterior half, with broader more diffuse glabrous medial longitudinal line; elytra slightly more parallel-sided, apices either symmetrical or asymmetrical (Figs 2, 3); terminal segments of abdomen with long golden hairs, T8 retracted into the genital chamber; ovipositor very short, bearing pair of styli at distal edge; styli bearing 2–4 long fine hairs interspersed with short tactile hairs; coxites medially and dorsolaterally bearing 6–8 long hairs interspersed with short tactile hairs; structure of distal reproductive system as in Fig. 10.



FIGS 8–14. *Uracanthus cupressianus* sp. nov. 8, adult male reproductive system; 9, adult male, paratype, dorsal pronotum; 10, adult female, ovipositor and distal portion of the reproductive system showing an egg in the common oviduct; 11, larval instar I, paratype, antenna; 12, larval instar VII, paratype, antenna; 13, larval instar VII, paratype, abdominal spiracle; 14, larval instar VII, paratype, pronotum. Scales: Figs 8 and 10 = 0.5 mm; Fig. 9 = 1 mm; Fig. 11 = 25 μm; Fig. 12 = 50 μm; Fig. 13 = 250 μm; Fig. 14 = 0.5 mm. ad = aedeagus; ag = accessory gland; bc = bursa copulatrix; c = coxite; co = common oviduct; ed = ejaculator duct; sp = spermatheca; st = stylus; te = testis; s = supplementary process.

Immature Stages

Egg: Length 1.5 mm width 0.6 mm; ovoid with one end slightly tapering and bearing a group of spicules, opposite end strongly tapering, truncate, with spicules that are roundly inclined; chorion light to dark grey and coarsely reticulate.

Larval Instar I: Length (Table 2); antennae hyaline, segment 3 with 1 distal peg and larger supplementary process (Fig. 11); mandibles and pronotum not strongly sclerotized, spiracles very small; abdominal segment 10 without caudal process and bearing few fine hyaline setae (Fig. 20).

TABLE 2. *Size of various life-history stages of* Uracanthus cupressianus *sp. nov. For stages LI to Pupa the width was measured across the pronotum and for adults it was measured across the widest part of the elytra.*

STAGE	LENGTH (mm)			WIDTH (mm)			
	$\bar{x}$	S.D.	RANGE	$\bar{x}$	S.D.	RANGE	n
LI	2.46	0.24	2.1–2.6	0.61	0.03	0.5–0.7	26
LII	3.36	0.55	2.2–3.8	0.66	0.22	0.6–0.8	10
LIII	5.60	1.66	4.3–8.6	0.89	0.26	0.7–1.2	25
LIV	10.49	1.92	7.8–15.2	1.52	0.28	1.2–2.2	25
LV	13.74	1.44	10.3–16.0	1.98	0.16	1.8–2.5	25
LVI	18.73	2.10	15.5–22.2	2.44	0.27	2.1–3.0	25
LVII	23.16	2.66	19.0–31.0	3.27	0.42	2.7–4.4	25
Prepupa	13.44	4.74	12.0–20.0	3.27	0.56	2.5–3.9	25
Pupa	16.83	1.44	13.5–19.0	2.42	0.16	2.2–2.7	15
Adult ♂	14.86	0.93	12.5–16.6	2.89	0.23	2.5–3.1	28
Adult ♀	17.65	1.42	14.4–19.6	3.54	0.44	2.7–4.7	26

Larval Instars II–IV: Length (Table 2); similar to instar I but differing in being progressively larger and more sclerotized and developing 3 small caudal tubercles on segment 10 (Fig. 19) which progressively become more sclerotized.

Larval Instars V and VI: Length (Table 2); generally similar to instar VII but smaller and with some of the morphological characters described for instar VII being difficult to see, particularly for instar V.

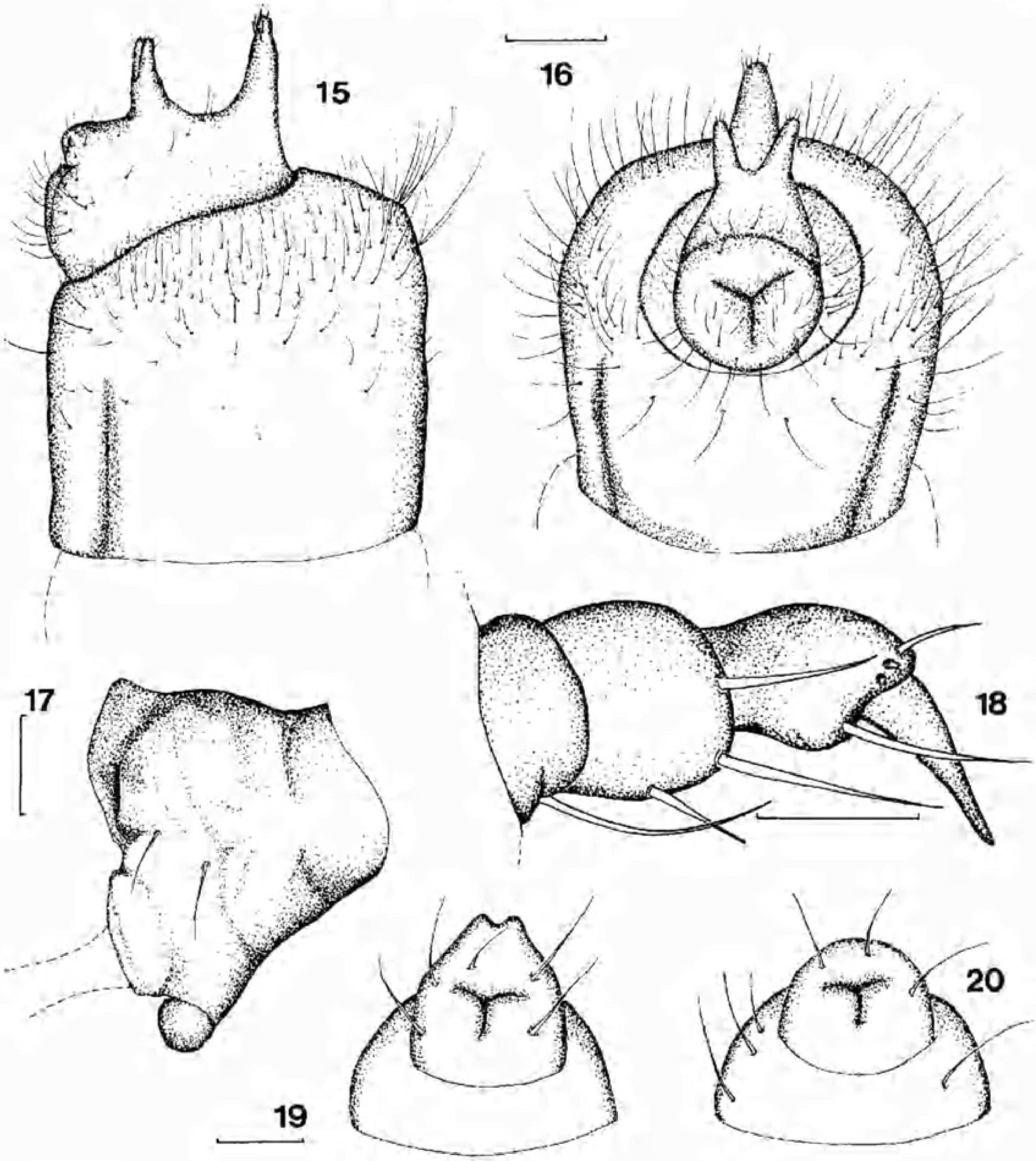
Larval Instar VII: Size (see Table 2); body elongate and subcylindrical, yellow to white in colour; pronotum with brown and pink patches; mouth bright red-brown; mandibles dark red-brown.
Head. Virtually parallel-sided; epistoma indistinct, with four epistomal setae; frons coarsely punctate, weakly sclerotized, bearing about 12 setae; median suture well defined, frontal suture indistinct; hypostoma strigate, bearing 5 long setae anteriorly near gular sutures; gular sutures raised and curved; gular region raised, hairless and weakly sclerotized; antennal segments strongly sclerotized, segments 2 and 3 bearing pegs, segment 3 with larger supplementary process (Fig. 12); clypeus membranous, trapezoidal, narrow, hairless; labrum circular and fringed anteriorly with long thick setae; mandibles short and stout, upper corner turned inwards and pointed, inner surface concave, outer surface with two long setae basally (Fig. 17).

Prothorax: Pronotum oval (Fig. 14), sometimes subrectangular, only slightly wider than posterior segments if at all, well sclerotized, posteromedial plate finely longitudinally striate with associated pigmented punctures, sparsely setose or glabrous, anterior half and lateral margins with long setae; prosternum sparsely setose, coarsely punctate, lightly sclerotized; eusternum semicircular, sparsely setose, finely punctate, sternellum very sparsely setose, with 6–10 fine setae.

Meso- and Metathorax: Mesotergum bearing x-shaped suture; metatergum with irregular suture; both these tergites with long reddish-brown setae laterally; mesosternum and metasternum bearing irregular transverse furrow.

Legs: Small; coxa strongly transverse; trochanter narrower with one long seta; femur as wide as trochanter, with three setae; tibiotarsus broad but narrower and longer than femur, with 3–4 setae; unguiculus not particularly elongate, about as long as tibiotarsus (Fig. 18).

Abdomen: First two dorsal ampullae bearing 4–5 transverse impressions delimited by one pair of lateral furrows and a median longitudinal furrow, remaining ampullae with indistinct tranverse impression; first four ampullae densely setose laterally, remaining three very sparsely setose; first five ventral ampullae with just one tranverse impression, last two ampullae with 2–3 impressions; first four epipleura not protuberant, bearing roundish pleural disc, 5th–7th epipleura slightly protuberant, each with single thick long seta and a few fine setae; 8th epipleuron not protuberant, with small round pleural disc; 9th epipleuron rounded posteriorly with numerous long thick reddish-brown setae; terminal segment (segment 10) usually bearing three short well sclerotized processes above anus, each process bearing a few short setae (Figs. 15, 16), sometimes with additional smaller lateral processes, or with main lateral processes wanting so only one large medial process is present; spiracles complex (Fig. 13), well sclerotized, red-brown.



FIGS 15–20. *Uracanthus cupressianus* sp. nov. 15, larval instar VII, paratype, distal segments of the abdomen, lateral view; 16, larval instar VII, paratype, distal segments of the abdomen, posteroventral view; 17, larval instar VII, paratype, mandible; 18, larval instar VII, paratype, metathoracic leg; 19, larval instar II, paratype, distal segments of the abdomen, posteroventral view; 20, larval instar I, paratype, distal segments of the abdomen, posteroventral view. Scales: Figs 15 and 16 = 0,5 mm; Fig 17 = 200 μm; Figs 18–20 = 100 μm (same scale for Figs 19 and 20).

Sexual dimorphism: Dissected male instar VII larvae differ from females by having two prominent reddish-yellow testicular follicles located ventrolaterally in abdominal segment 5. They can also be distinguished by having stouter and larger mouth parts. The ovaries in the females are hard to distinguish but can sometimes be seen as thread-like diffuse structures embedded in fat bodies.

Prepupa: There is a progressive contraction of the body during the prepupal period, which is initiated soon after larval instar VII has stopped feeding. The segmentation is very distinctive due to deep intersegmental infolds, which develop as a result of this contraction. The body colour changes to dull white or yellow, it becomes shorter (see Table 2), the thorax becomes thicker and the head turns ventrally. Numerous fat bodies are visible through the semi-transparent body wall.

Pupa: Size (Table 2); morphology generally the same as that described for other Cerambycinae (Duffy 1953); apparently with few unique distinguishing characteristics.

Other material examined: Immature stages - large number of eggs, larval instars I-VII and pupae, same data as adult paratypes, stored in 70% alcohol, WARI.

Comments

The adult of *Uracanthus cupressianus* is distinct from all described congeners. In general appearance it is most similar to *U. acutus* but differs from this species in the pronotum being more transversely strigate and pilose dorsally, the apices of elytra being less acutely pointed, and the elytra having four feeble longitudinal lines. *U. acutus* has the pronotum almost hairless and only weakly transversely strigate, the apices of the elytra acutely spinose, and the surface of elytra coarsely punctate and lacking longitudinal lines.

U. cupressianus also bears a superficial resemblance to *U. longicornis* Lea, *U. loranthi* Lea and *U. discicollis* Lea, but these species differ in several important characters. *U. longicornis* has the eyes almost touching ventrally, the pronotum very strongly transversely strigate and unevenly pilose, the antennae more robust and longer than the body, and the apices of the elytra narrowly rounded with an inner acute spine. *U. loranthi* has the pronotum irregularly transversely strigate-nodulate, with four longitudinal pilose bands dorsally, and the apices of the elytra broadly and diagonally truncate. *U. discicollis* has the surface of the pronotum completely smooth with much longer pilosity, the antennae longer than the body, and the elytra with dense inner longitudinal bands of dense long pilosity, but lacking longitudinal raised lines.

Of the three species of *Uracanthus* for which the final instar larva is known (Duffy 1963), *U. cupressianus* is most similar to *U. pallens*, particularly in the shape and arrangement of the posterior abdominal processes. These species differ, however, in the shape and pilosity of the pronotum, while the other two species, *U. triangularis* and *U. crytophagous*, differ from *U. cupressianus* in having smaller multilobed posterior abdominal processes.

Biology

U. cupressianus causes substantial damage to branches of introduced cypresses, *Cupressus* spp., particularly *C. sempervirens*, which are planted as ornamental trees in parks and gardens throughout the Adelaide region and in South Australian country towns. This insect also may be responsible for the sporadic damage seen on cypresses in Victoria and New South Wales. The larval stages tunnel up and down branches, quickly turning them brown and killing them. In some Adelaide suburbs up to 70% of all trees are damaged by the feeding activity of the larvae. The native host trees of *U. cupressianus* are thought to be *Callitris* spp. (Cupressaceae).

Adult beetles emerge in spring, mate and females lay eggs soon after at night on the bark of trees. The first instar larvae burrow into the sapwood and begin feeding and tunnelling. The larvae continue to grow and moult, with each branch usually accommodating only one larva. Small holes to the outside are occasionally produced to allow for the ejection of frass and possibly for the aeration of tunnels. Final instar larvae construct a chamber at one end of the main tunnel where pupation occurs. The life cycle of most individuals is biennial and includes a larval-pupal diapause, although some individuals take as little as one year to complete their development. The larva (III-V) of *U. cupressianus* is parasitized by a braconid wasp (Helconinae: Cenocoelini, genus and species indet.) and is preyed upon by a clerid beetle (recorded only in the larval stage), but these species never cause much mortality. The physiological condition of the host tree is probably a more important factor in regulating population numbers, a phenomenon which will be discussed in detail by one of us (SAR) at a later date.

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NEW ROTIFERS (ROTIFERA) FROM TASMANIA

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Summary

One hundred Tasmanian aquatic habitats were surveyed for Rotifera in spring 1987. Of 168 taxa identified, 59 were first records for Tasmania, 21 new to Australia and four (*Trichotria buchneri* sp. nov., *T. pseudocurta* sp. nov., *Lecane herzigi* sp. nov. and *Notommata tyieri* sp. nov.) new to science. New taxa are described and figured, several of the new records also are figured, and brief ecological information is given.
KEY WORDS: Rotifera, new species, new records, Tasmania, zoogeography.