

# Revising the American Platypodinae (Coleoptera, Curculionidae): the Neotropical genus *Tesserocranulus* Schedl, 1933 and its single included species *Tesserocranulus nevermanni* Schedl, 1933

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We present and analyze new data for *Tesserocranulus nevermanni* Schedl, 1933, the only species in the genus *Tesserocranulus* Schedl, 1933. The number of known specimens is increased from 12 to 142. We review the species' taxonomy, morphology, systematics and distribution. Diagnostic characters based on the head and thorax are detailed; the species is also slenderer than any known Platypodinae. The known distribution is from southwestern Costa Rica to the Amazon basin, where *T. nevermanni* occurs at elevations ranging from sea level to 1300 m.a.s.l. Most captures have been by trapping, primarily light traps and flight intercept traps.

Key words: Coleoptera, Curculionidae, Platypodinae, pinhole borers, *Tesserocranulus*, saproxylic, biodiversity, Neotropics.

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## Introduction

*Tesserocranulus nevermanni* Schedl, 1933 is one of the most striking pinhole borers (Platypodinae) in the Neotropics, if not in the world. In one of his first taxonomic papers, Karl E. Schedl erected the new genus *Tesserocranulus* solely for this unusual new species (Schedl 1933). Shortly after describing the single male, Schedl came across three examples of the equally unique female in the collection of Platypodinae from French Guiana stored in the National Museum of Natural

History in Paris (Schedl 1935). The distinctness of this genus was confirmed by Bjarte Jordal's phylogenetic analysis of Platypodinae (Jordal 2015) which included one *T. nevermanni* from Peru; Jordal found that the species was well separated from its nearest relatives, the species in the Neotropical genus *Tesserocerus* Saunders, 1837. The species is currently known only from 12 individuals. In this paper, we report records for 130 additional specimens and summarize knowledge of the taxonomy, systematics, distribution and natural history of *T. nevermanni*.

## Methods

**The records** reported include those from previous publications (Schedl 1933, 1935, 1976, Reichardt 1965, Jordal 2015, Kirkendall 2017, Rheinheimer 2021), from specimens we have identified during visits to museum collections or from loans we have received, and from communications with other researchers (see Acknowledgements and Tables 1–3). LRK (first author) frequently visited the insect collections at INBio (Instituto Nacional de Biodiversidad) to identify Scolytinae and Platypodinae that had been collected by INBio parataxonomists while he was in Costa Rica to participate in the four ALAS projects (Colwell & Longino 2005). His identifications were subsequently entered into their ATTA database. The 3 million insect records in ATTA were ultimately uploaded to GBIF (Vargas 2016) and we have downloaded those identifications that LRK had made for *T. nevermanni*. Identifications made by THA (second author) are already in the relational database that generates the webpages on his bark beetle and pinhole borer website (Atkinson 2024). Those made by LRK have been added or are in the process of being added to this database.

**Measurements** were taken in dorsal view using an ocular micrometer in a Leica Wild M8 stereomicroscope: pronotum length and width at 50 ×, elytral length at 25 ×. Body length was calculated as the sum of pronotum length and elytra length; this is referred to as “net body length” in Kirkendall & Atkinson (2023) and Kirkendall (2024). Net body length excludes the length of the head and any gap between pronotum and elytra. The pronotum length was measured along a median line from the anterior margin to the posterior margin, width measured at or just past the posterior margin of the femoral impression (the widest point). Elytral length was measured along a median line from the anterior margin of the elytra to the elytral apex. The length to width ratios reported here are net body length to pronotal width. The specimens measured were those in good condition that were in Kirkendall’s collection at the time of measurement and included 6 males and 9 females: Costa Rica (3♂♂2♀♀),

Brazil (1♂1♀), and Peru (2♂♂6♀♀). Mean body length is given along with the range and the standard error of the mean (SE).

**Acronyms** for collections that are cited (following Evenhuis 2023): **CAS** = USA, California, San Francisco, California Academy of Sciences; **CEAM** = Mexico, Montecillo, Colegio de Postgraduados, Centro de Entomologica y Acarologia; **CMNC** = Canada, Ottawa, Canadian Museum of Nature; **EGPC** = Italy, Belluno, personal collection of Enzo Gatti; **FSCA** = USA, Florida, Gainesville, Division of Plant Industry, Florida State Collection of Arthropods; **JRPC** = Germany, Ludwigshafen, J. Rheinheimer personal collection; **LRKC** = Norway, Bergen, University of Bergen, Department of Biological Sciences, Lawrence R. Kirkendall Collection; **MEFEIS** = Brazil, São Paulo, Ilha Solteira, Museo de Entomologia da FEIS/UNESP; **MNCR** = Costa Rica, San José, Museo Nacional de Costa Rica (has taken over the INBio collections); **MNHN** = France, Paris, Muséum National d’Histoire Naturelle; **MSUC** = USA, East Lansing, Michigan State University Arthropod Research Collection; **MZLU** = Sweden, Lund, Lund University Biological Museum; **NHMUK** = England, London, The Natural History Museum (United Kingdom); **NHMW** = Austria, Wien, Naturhistorisches Museum Wien; **OSUC** = USA, Ohio, Columbus, Ohio State University, C. A. Triplehorn Insect Collection; **RHTC** = USA, Alabama, Enterprise (personal collection, R. H. Turnbow, Jr.); **SEMC** = USA, Kansas, Lawrence, University of Kansas, Snow Entomological Museum; **SNSB** = Germany, Munich, Staatliche Naturwissenschaftliche Sammlungen Bayerns (= ZSM or ZSMC, Zoologische Staatssammlung); **TAMU** = USA, Texas, College Station, Texas A & M University; **UMSP** = USA, Minnesota, University of Minnesota (Saint Paul); **USNM** = United States, Washington, D.C., National Museum of Natural History; **UTIC** = USA, Texas, Austin, University of Texas, Insect Collection.

**TABLE 1.** Summary of all records for *Tesserocranulus nevermanni* Schedl, 1933 other than records retrieved from GBIF (Table 2) and light trap records from a Brazilian research project (Table 3). Where GPS data were given in degrees and minutes they have been converted to decimal, and decimal values with four or more significant figures were rounded to three significant figures (accurate to 110 m). Elevations are given in meters and rounded to nearest 100 m. Collected = method (if specified), collector(s). Nrs = numbers of specimens (nrs of each sex are given if specified in record). Dates are given as day/month/year. Collection = owner of specimens (see Methods for acronyms). Abbreviations: FIT = Flight intercept trap (includes “window trap”); UV = ultraviolet; Merc. = mercury; Unid. tree = unidentified host tree; *Eschweilera* = *Eschweilera sagotianum* (Lecythidaceae).  
Notes: \* Record is from the database maintained by T. H. Atkinson (THA) and (\*) the record is partly from Atkinson, partly from Kirkendall; these records were taken from the relational database that generates his bark beetle website pages (<https://www.barkbeetles.info/>). \*\* Records from Rheinheimer (2021). \*\*\* Record from C. H. Flechmann. Other entries are Kirkendall’s records and will be entered into the THA database.

Country: Province, Locality	GPS data	Elevation	Collected	Nrs	Date	Collection
COSTA RICA: Alajuela, Volcan Cacao, N slope*	10.922, -85.421	600–700	M. Sörensson	2	15/3/1986	MZLU
COSTA RICA: Guanacaste, Parque Nacional Guanacaste, Rio San Josecito, Est. Mengo	10.922, -85.470	1000	Holzenthal, Morse, Clausen	1♂, 1♀	28–29/7/1987	UMSP
COSTA RICA: Limón, Rio Reventazon, Hamburgfarm, Ebene	10.200, -83.767	0	At light, F. Nevermann	2♂ (1 is holotype)	26/7/1931	USNM
COSTA RICA: Limón, Rio Reventazon, Hamburgfarm, Sta Clara*	10.200, -83.767	0	F. Nevermann	2	10/6/1923	USNM
COSTA RICA: San José, Rio Damitas*		200	S. L. Wood	4	22/8/1963	USNM
PANAMA: Panamá, El Llano-Carti Rd., km 9.7*	9.278, -78.984		Merc. vapor + UV trap, R. H. Turnbow	1	24/5/1996	RHTC
PANAMA: Darién, PN Darién, Estac. Rancho Frio			R. Cambra, A. Santos	1♂	8/8–2/10/2002	LRKC
FRENCH GUIANA: N. Chantier			E. Le Moutt	1♂	1/1909	MNHN
FRENCH GUIANA: Réserve Trésor	4.610, -52.279	200	FIT, S. Brulé	1♀	11/2009	NHMK
FRENCH GUIANA: Roura, 30 km SE, Amazon Nature Lodge on Kaw Rd*	4.560, -52.207	300	UV light, J. E. Eger	28	18–23/4/2007	CAS, CEAM, FSCA, TAMU, UTIC
FRENCH GUIANA: Roura, 41 km SE on Kaw Rd*	4.537, -52.124	300	UV light, J. E. Eger, M. T. Messenger	1	5/6/2005	TAMU
FRENCH GUIANA: Roura, Montagne des Chevaux**			P.-H. Dalens	1	23/7/2009	JRPC
FRENCH GUIANA: Roura, Montagne des Chevaux***	4.749, -52.411		FIT, S. Brulé	1♀	4/7/2009	MEFEIS

TABLE 1. *continued*

Country: Province, Locality	GPS data	Elevation	Collected	Nrs	Date	Collection
FRENCH GUIANA: Montagne de Kaw, p.k. 36**			Cerda	1	29/3/1999	JRPC
GUYANA: Manaka*	6.700, -58.616		<i>Eschweilera</i> , D. J. Atkinson	1	10/1948–3/1949	USNM
BRAZIL: Rondonia, 62 km SW Ariquemes, Fazenda Rancho Grande (*)			UV light, C. W. O'Brien	3♂, 5♀, 4	10–17/11/1994	CAS, FSCA
BOLIVIA: Santa Cruz, Potrerillos de Guendá, 40 km NW Santa Cruz*	-17.671, -63.457	400	UV light, P. E. Skelley, J. E. Wappes	2	7/9/2012	FSCA
BOLIVIA: Santa Cruz, Buena Vista, 3.7 km SSE, Hotel Flora & Fauna*	-17.499, -63.553	400	Light trap, M. C. Thomas, B. K. Dozier	2	5/11/2001	FSCA
BOLIVIA: Santa Cruz, Florida, 4 km N Bermejo, Refugio Los Volcanes*	-18.100, -63.600	1000–1200	F. W. Skillman, J. E. Wappes	1	29/10/2011	FSCA
BOLIVIA: Santa Cruz, El Refugio Los Volcanes*	-18.106, -63.599	1000	Light trap, R. Morris	10	4–9/10/2007	FSCA
BOLIVIA: Santa Cruz, Espejo			F. Prosen	1♂	2/1962	unknown
PERU: Huanuco, Panguana ACP, Rio Yuyapichis, road to Estanque	-9.62, -74.93	200	UV light, F. Wachtel	3♂	21/6/2015	SNSB
PERU: Huanuco, Panguana ACP, Rio Yuyapichis	-9.62, -74.93		UV light, J. Monzon	1♂, 1♀; 1♀	1/2016; 12/2016	SNSB
PERU: Huanuco, Estanqueveg	-9.616, -74.936		Unid. tree, A. Gruppe, M. Gerhardt	1♂	29/9/2019	SNSB
PERU: Huanuco, Leoncio Prado, 20 km S from Tingo Maria, Cayumbo village	-9.494, -75.945	800	A. Petrov	1♂, 2♀	12/5/2012	LRKC
PERU: Junin, Satipo, near Rio Venado village	-11.196, -74.769	1100	A. Sokolov	1♀	1 3 – 30/11/2016	EGPC
PERU: Junin, Satipo, 15 km NW Satipo, Rio Venado	-11.199, -74.771	1100	FIT, A. Petrov	1♀	1 9 – 23/2/2013	LRKC
PERU: Junin, Satipo, 15 km NW Satipo, Rio Venado	-11.159, -74.768	1200	FIT, A. Petrov	1♀	1 3 – 15/3/2010	LRKC

TABLE 1. continued

Country: Province, Locality	GPS data	Elevation	Collected	Nrs	Date	Collection
PERU: Junin, Satipo, 15 km NW Satipo, Rio Venado	-11.199, -74.771	1200	FIT, A. Petrov	1 ♂, 1 ♀	3–4/4/2014	LRKC
PERU: Junin, Satipo, 15 km NW Satipo, Rio Venado	-11.193, -74.769	1300	FIT, A. Petrov	2 ♀	3/10/2015	LRKC
PERU: Junin, Satipo, 15 km NW Satipo, Rio Venado*	-11.193, -74.769	1200	A. Petrov	1	2/22/2011	UTIC
PERU: Lorecto, left river bank of Amazon, 74 km SW from Iquitos	-4.337, -73.516	200	FIT, A. Petrov	1 ♂, 1 ♀	1–5/3/2008	LRKC
PERU: Madre de Dios, Tambopata, Los Amigos Biological Station, CM-2	-12.449, -70.252	300	Unid. tree, S. M. Smith, J. Hulcr	1 ♂, 1	3–18/5/2008	MSUC, SEMC

TABLE 2. Unpublished records of *Tessierocranulus nevermanni* Schedl, 1933: summary of specimen data retrieved from GBIF. All but the Bolivia record are from INBIO specimens (now property of MNCR); all were identified by the senior author. The method of collection was only specified for two records (3 specimens). For full data, search GBIF.org for “*Tessierocranulus*”. CR = Costa Rica; BO = Bolivia. Dates are given as day/month/year.

Country: Province, Locality	GPS data	Elevation (m)	Collector(s)	Nr specimens	Date
CR: Guanacaste, sector Las Pallas, 4.5 km SW of Volcán Rincón de Vieja	10.777, -85.352	800	K. Taylor	1 ♀	7–23/1/1994
CR: Guanacaste, Liberia, Estación Cacao, 2 km SW of Cerro Cacao	10.930, -85.470	1100–1400	R. Bianco, C. Chavez	1 ♂, 1 ♀	1–30/9/1989
CR: Guanacaste, Bagaces, Fortuna, Estación Cabro Muco	10.718, -85.145	1100	B. Hernández	1 ♀ Mercury vapor light trap	27–29/9/2003
CR: Puntarenas, Golfito, Jiménez, Parque Nacional Corcovado, Estación Sirena, Playa Sirena	8.480, -83.591	1–100	G. Fonseca	3 ♂	1–30/3/1990
CR: Puntarenas, Golfito, Jiménez, Parque Nacional Corcovado, Estación Sirena, Playa Sirena	8.480, -83.591	0–100	G. Fonseca	1 ♀	1–30/11/1990
CR: Puntarenas, Golfito, Jiménez, Parque Nacional Corcovado, Estación Sirena, Playa Sirena	8.480, -83.591	1–100	G. Fonseca	1 ♂, 2 ♀	1–31/5/1991
CR: Puntarenas, Golfito, Jiménez, Parque Nacional Corcovado, Estación Sirena, Playa Sirena	8.480, -83.591	1–100	G. Fonseca	1 ♂	1–30/11/1992

TABLE 2. continued

Country: Province, Locality	GPS data	Elevation (m)	Collector(s)	Nr specimens	Date
CR: Puntarenas, Golfito, Jiménez, Parque Nacional Corcovado, Estación Sirena, Playa Sirena	8.480, -83.591	1–100	G. Fonseco	1 ♀	1–30/6/1995
CR: Puntarenas, Aguirre, Quepos, Parque Nacional Manuel Antonio	9.388, -84.133	80	R. Zuñiga	1 ♂, 1 ♀	1–28/2/1991
CR: Puntarenas, Aguirre, Quepos, Parque Nacional Manuel Antonio	9.388, -84.133	80	R. Zuñiga	1 ♀	1–31/3/1991
CR: Puntarenas, Aguirre, Quepos, Parque Nacional Manuel Antonio	9.388, -84.133	80	R. Zuñiga	1 ♂, 1 ♀	1–30/6/1991
CR: Puntarenas, Aguirre, Quepos, Parque Nacional Manuel Antonio	9.388, -84.133	80	G. Varela	1 ♀	1–31/12/1991
CR: Puntarenas, Reserva Biológica Carara, Estación Quebrada Bonita	9.767, -84.608	50	R. Zuñiga	1 ♀	1–31/5/1990
CR: Puntarenas, Reserva Biológica Carara, Estación Quebrada Bonita	9.767, -84.608	50	R. Zuñiga	1 ♀	1/4–1/5/1991
CR: Puntarenas, Reserva Biológica Carara, Estación Quebrada Bonita	9.767, -84.608	50	R. Zuñiga	1 ♀	1–30/6/1991
CR: Puntarenas, Reserva Biológica Carara, Estación Quebrada Bonita	9.776, -84.608	50	R. Zuñiga	1 ♂, 1 ♀; coll. by hand	1–31/3/1991
BO: Chapare, Cochabamba, Alto Palmar, Hotel Yungas de Chapare	-17.138, -65.509	Not given	Not given	2 (OSUC)	23/10/1959

Taxonomy and systematics

Taxonomic history

The genus *Tesserocranulus* was erected by Karl Schedl to include the distinctive male of the species (in NHMW) that he described under the name *Tesserocranulus nevermanni* (Schedl 1933). The specimen was one of many Scolytinae and Platypodinae that Schedl received from the coleopterist W. H. Ferdinand Nevermann, collected from the latter’s “Hamburgfarm” on the lower Rio Reventazón (Platnick et al. 2014). Shortly thereafter, Schedl came across several museum specimens of what was clearly the female of the same species, among platypodines collected in French Guiana by the lepidopterist and insect seller Eugène Le Moult (Schedl 1935, Wikipedia contributors 2023). Two of these females are in Vienna (NHMW) and one in Paris (MHNC; Menier 1971). One of the two Vienna females was subsequently labelled “Paratype” and “Allotype” by Schedl, while the Paris female retains his original “Type” label. None of these three females are paratypes, however, as they are not from the original type series (ICZN 1999; Art. 72.4.5). But since the ICZN does not regulate allotypes, the so-labelled NHMW female can be properly considered the allotype of the species. There are no further published



**TABLE 3.** New records of *Tesserocranulus nevermanni* Schedl, 1933, from C. H. Flechtmann: Pennsylvania light trap records from Brazil. All are from: Pará, Belterra, Floresta Nacional do Tapajós, ombrophilous dense terra firme forest, BR-163 km 67, 2°51'23.3" S 54°57'31.0" W [-2.856, -54.959], A. N. Carvalho.

	Trapping dates	Specimens
At canopy height, 23–45 m	12–14 December 2020	1♂1♀
	9–11 April 2021	1♂2♀♀
	5–7 August 2021	1♀
	5–7 November 2021	2♀♀
	3–5 Febraur 2022	2♂♂1♀
	3–5 March 2022	1♂
At 2 m height	8–10 October 2021	1♀
	3–5 December 2021	2♂♂
	29 May–1 June 2022	3♂♂

reports of the species until Hans Reichardt (1965) figured a male that had been collected in Bolivia. Another decade elapsed before a record of one more specimen collected by Roppa and Alvarenga in Linhares, Brazil was published by Schedl (1976). Finally, in the last decade, Jordal (2015) sequenced one specimen from Peru, the senior author reported two collections (3 individuals) from Peru (Kirkendall (2017) and Rheinheimer (2021) published two records from French Guiana (2 individuals). Until the current paper, then, this easily recognizable species was known from 12 specimens and was generally thought to be rare.

**Taxonomy**

***Tesserocranulus nevermanni* Schedl, 1933**  
(Figure 1)

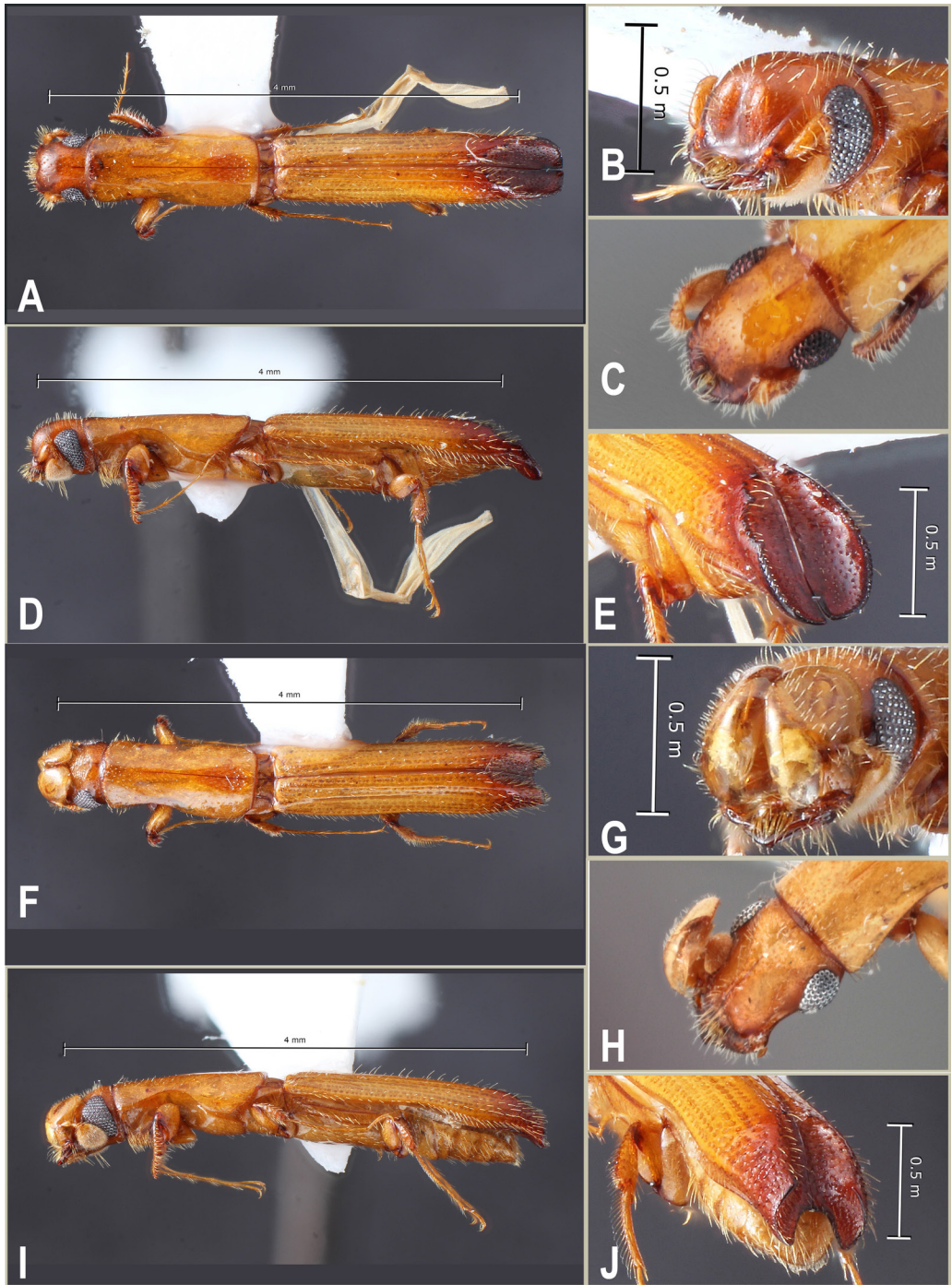
*Tesserocranulus nevermanni* (and hence the genus, *Tesserocranulus*) is recognized as a Platypodinae by the cylindrical form, geniculate (elbowed) antennae, complete lack of a rostrum, and the elongate first tarsal segment that is longer than segments 2–5 together (Jordal 2014). The species is distinguished from all other Neotropical Platypodinae by the elongate body form, total body length being about six times as long as wide. The pronotum anterior to the femoral impression is visibly distinctly narrower than is its width posterior to the femoral impression

(Figure 1A, F), more so than in any other Neotropical Tesserocerini. In females, the greatly enlarged obovoid antennal scape (larger than the antennal club and larger than the eye: Figure 1E, F) is unique to Platypodinae, as is the forward projection of the middle and lower frons which is strongly bilaterally impressed on either side of a vertical carina (Figure 1H). The lower half of the male frons, too, is quite distinctive, being strongly inflated (Figure 1B, C). Also unique is the extremely long midline on the pronotum, which extends nearly the entire length of the pronotum (Figure 1A, F).

In the small sample sizes available, males (N = 6) averaged 4.0 mm long (3.8–4.4 mm, SE = 0.10) and varied from 5.3–7.1 × long as wide. Females (N = 9) averaged 3.8 mm long (3.3–4.2 mm, SE = 0.09) and varied from 5.8–6.5 × long as wide.

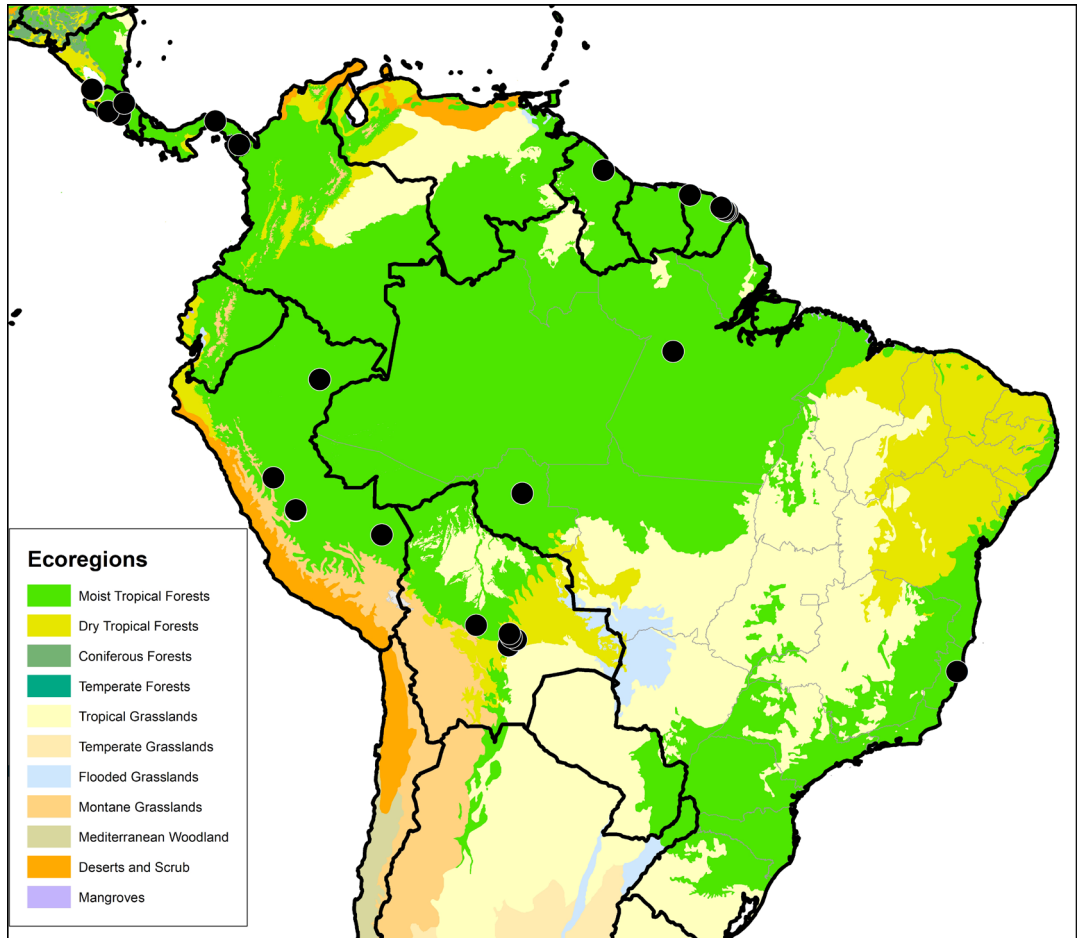
The male holotype from Costa Rica was thoroughly described by Schedl (1933), and the female allotype equally so by the same author (Schedl 1935). The male has been figured by both Reichardt (1965) and Schedl (1972) and there is a photograph of a male in Rheinheimer (2021). Both sexes are easily identified to species from photographs (Figure 1) and identification can be confirmed by using the diagnostic characters given above.

Jordal (2015) reconstructed the molecular phylogeny of Platypodinae genera based on 3648 nucleotides from five different genes. His



**FIGURE 1.** *Tesserocranulus nevermanni* Schedl, 1933. Male (A–D). A. Dorsal habitus. B. Frons and antenna. C. Lateral habitus. D. Declivity. Female (E–H). E. Dorsal habitus. F. Frons and antenna. G. Lateral habitus. H. Declivity. Photos: T.H. Atkinson, specimens from French Guiana, Cayenne, Amazon Nature Lodge, Kaw Road, 30 km SE Roura, 4.5595 N, 52.2072 W, 300 m, 18.IV.2007; J.E. Eger (leg.), UTIC.





**FIGURE 2.** Collection localities for *Tesserocranulus nevermanni* Schedl, 1933. Ecoregions modified from Olson et al. (2001).

phylogeny of Tesserocerini agrees well with previous morphologically based hypotheses about relationships in that tribe. He found that *Tesserocranulus* and *Tesserocerus* evolved in separate lineages that diverged from a common ancestor about 54 million years ago. His analysis found this Neotropical clade (*Tesserocerus* + *Tesserocranulus*) to be the sister group to the Old World genus *Periommatius* and that *Tesserocranulus* has thus evolved quite separately from the other Neotropical Tesserocerini genus *Cenocephalus*.

**Distribution and biology.** All previous and new records have been assembled in Tables 1–3, and current knowledge of the species’ distribution

in Central and South America is presented in Figure 2. *Tesserocranulus nevermanni* is strictly tropical, and has been found in moist tropical forests ranging from 11°N to 18°S, at elevations ranging from near sea level to 1300 m. The species has thus far been collected from southwestern Costa Rica, Panama, French Guiana, Guyana, Brazil, Bolivia, and Peru. We expect it to also occur in rainforests of Suriname, Venezuela, Colombia, Ecuador, Uruguay and Argentina. The northern limit for the species seems to be Costa Rica, and a variety of other lowland Platypodinae species in the Americas have the same northern limit (Kirkendall 2017). While Costa Rica may well represent a true northern distributional boundary,

Platypodinae are severely undercollected in Central America (Kirkendall & Atkinson 2024). It is interesting that *T. nevermanni* has been collected only on the southwest side of Costa Rica; the lowland wet tropical forests of northeastern Costa Rica have seen intensive trapping (including flight intercept and light trapping) during the 14 year period (1992–2005) of the four iterations of the ALAS project (Colwell & Longino 2005). The map also reveals a striking paucity of records from most of the Brazilian Amazon that is most likely due to undercollecting there (Kirkendall & Atkinson 2024).

Very little is known of the biology of this morphologically unique species. For many records the collecting method is unknown, but well over half (83) were collected at light, suggesting that the species is nocturnal (Tables 1–3). Supporting this is the fact that the eyes are relatively large for Platypodinae and come close to meeting under the head (Schedl 1933, 1935). Many species of Platypodinae are caught in Malaise traps (Kirkendall 2017, Kirkendall & Atkinson 2024) but no specimens of *T. nevermanni* have been caught in one, in the samples we have seen. We have identified 106 Platypodinae species from 1217 specimens that were caught in Malaise traps in the Neotropics, but zero *Tesserocranulus* (Kirkendall & Atkinson 2024). In the same data set (that does not include most of the records we report here), the species comprised 16 of 910 Platypodinae individuals taken by light, and 9 of 1115 caught by flight intercept traps. This significant difference among trapping methods (contingency table chi-square 21.06, 2.d.f.,  $p < 0.001$ ) suggests that this species is repelled by larger concentrations of ethanol such as waft from the collection bottles of Malaise traps. Further supporting this hypothesis, no specimens have yet been reported from ethanol-baited flight intercept traps deployed throughout Brazil (C. H. Flechtmann, pers. comm. October 2023), though 18 have been caught in light traps in that country (Table 3).

We are struck by the large numbers captured at light traps that were run for several days in the same place, as many as 28 in a six day period (Table 1), suggesting the possibility that

*Tesserocranulus* males employ pheromones for attracting mates. Presumably there were active attacks in progress on dead trees near the light traps. Use of pheromones is primitive in weevils, and male production of pheromones for long distance attraction is widespread in Platypodini but not yet known from Tesserocerini (Kirkendall & Atkinson, 2024).

*Tesserocranulus nevermanni* has been considered to be rare since so few specimens were reported in publications before 2017; the total now is 142. However, there is only one host record, *Eschweilera sagotianum* (Lecythidaceae). It is likely that the species is a host generalist as are most platypodines (Kirkendall & Atkinson 2024), but this hypothesis remains to be tested.

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