

ber als 7 mm, auf ihrem Quarzgehalt zu untersuchen. Die untersuchten Proben stammen in der Hauptsache Wasserbohrungen her. An der Oberfläche gesammeltes Material liegt jedoch ebenfalls vor. Auffallend grosse Gerölle und Geschiebe werden stets vor der Untersuchung herausgeholt. Nach sorgfältiger Reinigung wird die Kiesmenge gewogen. Nachher werden die weissen, grauen, gelben und braunen Quarzgerölle (Gangquarze) hinausgesucht und ebenfalls gewogen. So wird von jeder Probe ein Quarzprozentsatz gefunden. Die Vergleichung der Gewichtsverhältnisse zeigte sich mehr empfehlenswert als die Zählung der Quarzkiese und der sonstigen Gerölle und Geschiebe, gleichwohl doch ebenfalls diese Methode brauchbar ist.

Ueber die Ergebnisse liegt nach einem Vortrag in 1936 und zwei Veröffentlichungen in den Jahren 1937 und 1938 jetzt der dritte Aufsatz vor, welcher besonders für die geologischen Verhältnisse der Maasablagerungen wichtig ist.

Es war möglich durch den Quarzgehalt darzulegen, dass die Hochterrasse des Rheines und der Maas aus dem Riss I im grössten Teile der Niederlande noch anwesend ist oder wenigstens einstweilen abgelagert worden ist. Die Zusammensetzung der Kiesbestandteile zeigte überall nur örtliche Unterschiede: der Durchschnittsgehalte von 58.1 % wurde mit den üblichen Schwankungen an allen Stellen gefunden.

Nur im südlichen Teil der Provinz Limburg wurden Maasablagerungen der Hochterrasse mit einer niedrigeren Prozentzahl aufgefunden. Einsteils war es weiter möglich die älteren Maaskiese unter den gemischten Rhein- und Maassedimenten anzuzeigen, anderteils konnten die Maaskiese der Mittelterrasse (Riss II) an beiden Seiten der Maas, westlich bis viele km tief in Brabant hinein nachgespürt worden (Prozentzahl ungefähr 45). Die Rheinkiese aus derselben Zeit enthalten einen gleichen Quarzgehalt. Dieselben werden besonders deutlich im Stromgebiet des Gelderschen IJssels aufgefunden und sind jünger als die fluvio-glazialen Sande des Riss II.

Die kieshaltigen Sande des Riss-Glazials, des Riss-Fluvioglazials, des Eemien (Riss-Würm-Interglazials) und des Würmglazials (Niederterrasse) zeigen alle einen niedrigeren Quarzgehalt, welcher in den glazialen Ablagerungen s. str. bisweilen nur einige wenige Prozente beträgt.

Im allgemeinen wird der Prozentsatz in den verschiedenen Stufen der südlimburgischen Maas-terassen je niedriger, je jünger die Stufe.

Die kieshaltigen Sande des Präglazials älter als die Hochterrasse oder des Prärißiens zeigten in dem oberen Teil eine Prozentzahl von 70 bis 80 Prozent und in den unteren Teil von 80 bis 90 Prozent und möglicherweise in den ältesten Schichten (Günzglazial bis Pliozän) von über 90 Prozent.

Indem die Hochterrasse und die Mittelterrasse nur ausnahmsweise Fossilien enthalten und die stratigraphische Gliederung des älteren, fluvial-terrestrischen Pleistozäns inkl. Pliozäns auf Grund von Säugetierresten, von Süsswasser- und Land-

mollusken und von paläobotanischen Funden nicht immer möglich ist, so bietet die Bestimmung des Quarzbestandteiles der kiesführenden Sande eine Methode dar, welche in vielen Fällen wenn nicht schlagende Beweise liefert, jedoch in bestimmte Richtung hinweisende Schlussfolgerungen gestattet.

ON A COLLECTION OF
INDO-AUSTRALIAN, MELANESIAN
AND MICRONESIAN TETTIGONIIDAE

by

C. WILLEMSE.

1915. *Euconocephalus pallidus*, Karny, Suppl. Entom., p. 74.
 1920. *Euconocephalus pallidus*, Karny, Zoolog. Meded. Leiden, V, p. 163.
 1921. *Euconocephalus pallidus*, Karny, Philipp. Journ. Sci., XVIII, 5, p. 607.
 1922. *Euconocephalus pallidus*, Hebard, Proc. Ac. Nat. Sci. Philad., LXXIV, p. 239.
 1922. *Euconocephalus pallidus*, Dammerman, Treubia, III, p. 109.
 1923. *Euconocephalus pallidus*, Karny, Journal Mal. Br. R. Asiat. Soc. Vol. I, p. 193.
 1926 (25). *Euconocephalus pallidus*, Karny, Journ. Fed. Mal. States Mus., vol. XIII, p. 153.
 1926. *Euconocephalus pallidus*, Karny, Treubia, vol. IX, p. 253.
 1926. *Euconocephalus pallidus*, Fulmek, Misc. Zoolog. Sumatr. I, p. 3.
 1927. *Euconocephalus pallidus*, Ebner, ibid., XX, p. 3.
 1927. *Euconocephalus pallidus*, Karny, Arkiv f. Zoolog., Bd. 19 A, No. 12, p. 11.
 1928. *Euconocephalus pallidus*, Ebner, Treubia, vol. X, p. 51.
 1930. *Euconocephalus pallidus*, Furukawa, Bull. Biogeogr. Soc. Japan, vol. I, p. 233.
 1933. *Euconocephalus pallidus*, Willemse, Mém. Mus. Royal Hist. Nat. d. Belg., hors serie, vol. IV, fasc. 8, p. 15.

In the collection of the Bernice Bishop Museum of Honolulu, there is a male from the Caroline Islands (Truck Isl.) belonging to this species.

The geographical distribution is a very large one, extending from India, Ceylon, Silhet, Burma, Malacca, Tonkin to Sumatra, Java, Borneo, Philippines, Molucian Islands, New Guinea, the Isl. of Bonin and Tsushima near Japan and the Caroline Islands.

Euconocephalus varius Walker.

1815. *Conocephalus lanceolatus*, (nec Fabricius), Thunberg, Mem. Acad. St. Petersburg, vol. 15, p. 272.
 1842. *Locusta* (*Conocephalus*) *acuminata* a, de Haan, Verh. Ned. Overz. Bezitt., Orth., p. 213.

1869. *Conocephalus varius*, Walker, Cat. Derm. Salt. B. M., II, p. 320.
 1874. *Conocephalus Thunbergii* (nec Montrouzier), Stål, Rec. Orth., II, p. 109, no. 2.
 1891. *Conocephalus Thunbergii*, Redtenbacher, Verh. Zoolog.-bot. Ges. Wien, XLI, p. 383, 414.
 1902—05. *Conocephalus Thunbergii*, Jacobson and Bianchi, Pseudoneuropt. and Orth. Russian Empire (russian), p. 337, 382.
 1906. *Conocephaloides varius*, Kirby, Syn. Cat. Orth., II, p. 249.
 1908. *Conocephalus Thunbergii*, Matsumura and Shiraki, Locust. Japans, p. 38.
 1912. *Euconocephalus varius*, Karny, Gen. Insect. fasc. 139, p. 34.
 1915. *Euconocephalus varius*, Bruner, Univers. Stud. Lincoln, vol. XV, no. 2, p. 269.
 1920. *Locusta (Conocephalus) acuminata*, Karny, Zoolog. Meded., V, p. 163, 205.
 1922. *Euconocephalus varius*, Hebard, Proc. Acad. Nat. Sc. Philad., vol. LXXIV, p. 238.
 1931. *Euconocephalus varius*, Matsumura, Six thousand insects of Japan, p. 1354.
 1935. *Euconocephalus varius*, Chang, Mus. Heude, Notes d'Entomol. Chin., vol. II, 3, p. 64.
 1938. *Euconocephalus thunbergi*, Furukawa, Annot. Zool. Japon, vol. 17, no. 3/4, p. 559.

From this species the Baseler Museum contains a ♂ from the Solomon Islands (Makira, Wai Ma-moera, III 20, E. Paravicini).

This species was determined by H. Karny and compared with specimens of *E. Thunbergi* from the Redtenbacher collection in the Museum of Vienna.

This species is now known to occur in China, Japan, Coö Choo Isl., Bonin Isl., Tonkin, Silhet, the Philippines and Solomon Islands.

Subfam. : CONOCEPHALINAE.

Conocephalus brevixiphus nov. spec.

♂, ♀ : Size medium, form slender. General coloration yellowish brown, vertex and pronotum with the usual, median, brown or reddish brown stripe, bordered with yellow. Antennae long and slender, yellowish brown.

Fastigium of vertex nearly horizontal, broad, seen in front distinctly widened. Posterior margin of lateral lobe of pronotum slightly rounded, humeral sinus distinct, callosity oval, indistinct.

Elytra reaching behind the apex of hind femora, wings surpassing the elytra a little, yellowish brown, in some specimens area anterior and anal area darker coloured, but without dark spots or bands.

The male stridulating field in the left elytra small, longer than broad, divided into two unequal spaces as figured by fig. 3.

Prosternum bispinose. Abdomen yellowish brown, without blackish or brownish black bands.

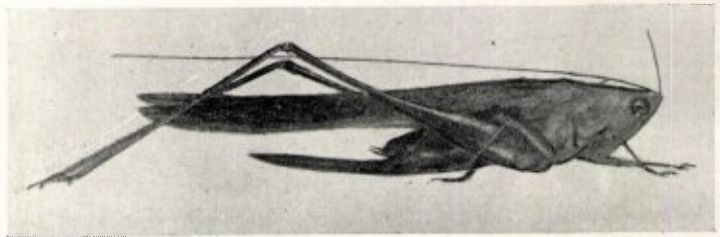


Fig. 2. *Conocephalus brevixiphus* nov. sp. ♀. type.

Foto Deenen

Anterior tibiae with a row of 5—6 spines from below on each side. Hind femora yellowish brown, slender, without spines, kneelobes bidentate on each side. Hind tibiae with 3 pairs of spurs at their apex.

♂ : Supraanalplate about as broad as long, triangular, broadly rounded posteriorly. Cercus viewed from above slightly curved, apex pointed, in the middle with a slightly curved and sharply pointed tooth. Subgenitalplate longer than broad, hind margin nearly straight, styli short, straight.

♀ : Supraanalplate small, triangular.

Cercus short, conical, straight, apex subacute. Ovipositor short, much shorter than the hind femora nearly straight, narrow, not widened in the middle. Subgenitalplate longer than broad, narrowing posteriorly, posterior margin rounded.



Fig. 3. *Conocephalus brevixiphus* nov. sp. ♂. Stridulating field of left elytra.

Fig. by Deenen

	♂	♀
Length of body	12—14 mm	14 mm
" " pronotum	3 "	3 "
" " elytra	16—19 "	18 "
" " hind femora	12,5 "	14 "
" " ovipositor		8,5 "

Locality : Australia, N. Territ. Burnside, June 1931, 2 ♂♂, 1 ♀ ; Murrumbidgee, May 1931, 2 ♀♀ ; Katherine, May 1931, 1 ♂, Coll. E. Hand-schin. Type Mus. Basel.

This species is related to *laetum* Redt. but differs in the short ovipositor and in its shape. Perhaps there are also differences in the shape of the stridulating field of the male.

Conocephalus dubius nov. spec.

♂, ♀ : Size large for the genus, form robust. General coloration yellowish brown or greenish,

vertex and pronotum with the usual, broad, median, brown or reddish brown band or bordered by a darker stripe.

Antennae long and slender, yellowish brown. Fastigium of vertex slightly ascending, its sides nearly parallel, seen in front not or scarcely widened. Posterior margin of lateral lobes of pronotum straight, humeral sinus indicated, callosity indistinct.

Elytra and wings long, reaching far behind the apex of hind femora.

Wings extending a little beyond the apex of elytra. Elytra yellowish brown, without dark spots or bands. The stridulating field in the left elytra of the male, small, a little longer than broad, divided into two unequal spaces as figured by fig. 4.

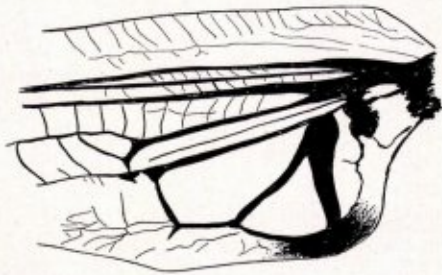


Fig. 4. *Conocephalus dubius* nov. sp. ♂.
Stridulating field of left elytra.

Fig. by Deenen

Prosternum bispinose. Abdomen brown or yellowish brown, without black bands or stripes.

Anterior tibiae with a row of 5—6 spines from below on each side.

Hind femora slender without spines, knees unicolorous, kneelobes bidentate on each side. Hind tibiae with 3 pairs of spines at their apex.

♂: Supra analplate small, triangular. Cercus broad at their base, slightly curved, apex pointed, in the middle with a slightly curved, short and sharp tooth. Subgenitalplate about as long as broad, posterior margin straight, styli short, straight.

♀: Supraanalplate short, triangular. Cercus slightly curved upwards, short, cylindrical, apex

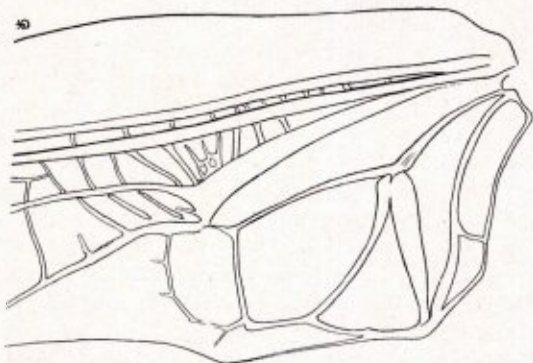


Fig. 5. *Conocephalus longipenne* de Haan
♂. type. Stridulating field of left elytra.
Figured by Dr. C. de Jong.

more or less pointed. Ovipositor about as long as the hind femora, nearly straight. Subgenitalplate longer than broad, narrowing posteriorly, posterior margin nearly straight.

Length of body	15 mm	18 mm
" " pronotum	4 "	5 "
" " elytra	20 "	25 "
" " hind femora	14 "	19 "
" " ovipositor		17 "

Locality: Australia, N. Territ., Burnside, April 1931 (coll. E. Handschin) 2 ♂♂, 1 ♀.
Type Mus. Basel.

This species runs in the key of Karny near *longipenne* de Haan, from which it differs in the shape of the stridulating field of the left elytra in the male (Fig. 5).

¹⁾ H. Karny, *Revisio Conocephalidarum*, Abh. K. K. Zool.-Botan. Gesells. Wien. Bd. IV, 1907, p. 92.

Conocephalus tumultuosus nov. spec.

♂: Size medium, form slender. General coloration yellowish brown, vertex and pronotum with the usual median brown stripe, in the posterior part of the pronotum less distinct. Antennae long and slender, yellowish brown, annulated.

Fastigium of vertex broad, its sides widened anteriorly, seen in front distinctly widened. Posterior margin of lateral lobes of pronotum nearly straight or subrounded, callosity indistinct, humeral sinus less indicated.

Elytra yellowish brown, with rudimentary venation, short, not surpassing the abdomen, distinctly longer than the pronotum, wings very short, rudimentary. Stridulating field in the left elytra relatively large, slightly longer than broad, divided into two, unequal spaces as figured by fig. 6.

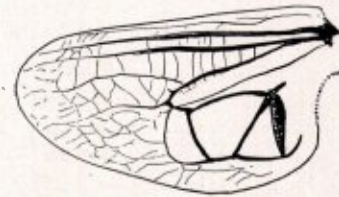


Fig. 6. *Conocephalus tumultuosus* nov. sp. ♂.
Stridulating field of left elytra.

Fig. by Deenen

Prosternum bispinose. Abdomen inflated posteriorly, yellowish brown, the first tergites brown from above, sides of tergites broadly bordered with reddish brown.

Anterior tibiae with a row of 5—6 spines from below on each side.

Hind femora slender, with a row of 6 black spines on the outer lower margin, knee blackish on the extreme tip, kneelobes bidentate on each side.

Hind tibiae with 3 pairs of spurs at their apex.

♂: Supra analplate broad, broader than long,

hind margin broadly rounded. Cercus slightly curved, apex pointed, in the middle with a short, curved tooth. Subgenitalplate large, about as broad as long, narrowing posteriorly, posterior margin nearly straight, styli small, straight.

Length of body	♂	14 mm
" " pronotum		4 "
" " elytra		6 "
" " hind femora		12,5 "

Locality: Australia, N. Territ. S. Lagoon, 1 ♂, April 1931, coll. E. Handschin. Type Mus. Basel.

This species runs in the key (loc. cit. p. 90) near *C. vestitum* Redt. from which it differs in the shape of the large stridulating field.

Conocephalus striata nov. spec.

♂ : Size small, form slender. General coloration yellowish brown (green in vivo?), vertex and pronotum with the usual brown median stripe, on the pronotum lighter coloured and bordered with dark brown and yellow.

Lateral lobes of pronotum in the middle with a brown longitudinal stripe.

Antennae long and slender, yellowish brown. Fastigium of vertex slightly ascending, widened anteriorly, seen in front distinctly widened.



Fig. 7. *Conocephalus striata* nov. sp. ♂.
Stridulating field of left elytra.

Fig. by Deenen

Posterior margin of lateral lobe of pronotum subrounded, humeral sinus indicated, callosity indistinct.

Elytra yellowish brown, short, only reaching a little beyond the base of hind femora, wings rudimentary. Stridulating field in the left elytra small, somewhat longer than broad, divided into two unequal spaces as figured by fig. 7.

Prosternum bispinose. Abdomen yellowish brown, the first tergites from above and from the sides with a row of brown spots.

Anterior tibiae with a row of 4—5 spines from below on each side.

Hind femora slender, without spines, kneelobes bidentate on each side.

Hind tibiae with 3 pairs of spurs at their apex.
♂ : Supra analplate broad, hind margin broadly rounded, with a median, shallow sulcus.

Cerci long, slightly curved, apex pointed, in the middle with a short sharply pointed tooth. Subgenital plate about as long as broad, posterior margin slightly rounded, styli short, straight. Fig. 8.

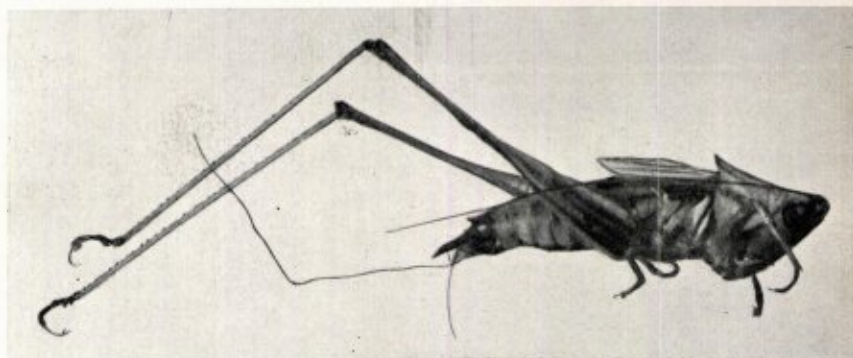


Fig. 8. *Conocephalus striata* nov. sp. Type ♂.
Foto Deenen

Length of body	♂	13,5 mm
" " pronotum		3 "
" " elytra		4,5 "
" " hind femora		11,5 "

Locality: Australia, N. Territ., Burnside, May 1931 (E. Handschin). 1 ♂. Type Mus. Basel.

This species runs in the key (loc. cit. p. 90, 93) near *C. brunneri*, *geniculare*, or *cognatum*.

Conocephalus ensiferus nov. spec.

♀ : Size large for the genus, form robust. General coloration yellowish brown, probably greenish when alive.

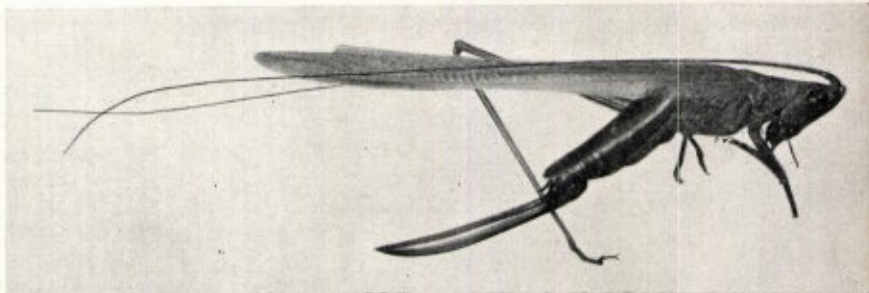


Fig. 9. *Conocephalus ensiferus* nov. spec. Type ♀.
Foto Deenen

Vertex and pronotum with the usual median reddish brown, broad stripe. Antennae long, reddish brown. Fastigium of vertex narrow, slightly ascending anteriorly, its sides parallel, seen in front not widened. Posterior margin of lateral lobe of pronotum nearly straight, humeral sinus slightly indicated, callosity indistinct.

Elytra and wings long, reaching far behind the apex of hind femora, wings surpassing the elytra with about 6 mm; elytra reddish brown, without dark spots, wings hyalinous.

Prosternum bispinose. Abdomen yellowish brown without dark bands or spots.

Anterior tibiae with a row of 5—6 spines from below on each side. Hind femora slender, with 3

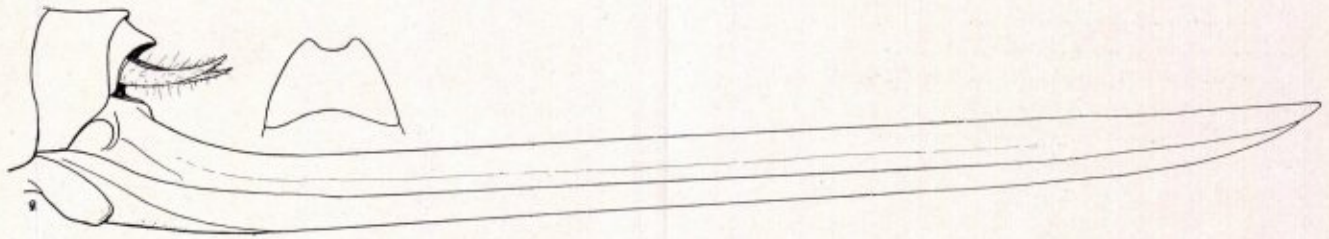


Fig. 11. *Conocephalus longipenne* de Haan. ♀ ovipositor and subgenital plate.
Type. Figured by Dr. C. de Jong.

small, black spines on the lower outer margin, knee slightly fuscous, kneelobes bidentate on both sides.

♀: Supra-analplate small, triangular. Cercus conical, short, slightly curved, apex subacute. Ovipositor a little shorter than the hind femora, straight, broad, distinctly ensiform. Subgenitalplate somewhat longer than broad, narrowing posteriorly, hind margin slightly emarginate. ♂ unknown. Fig. 9, 10.



Fig. 10. *Conocephalus ensiferus* nov. sp.
♀. ovipositor.

Fig. by Deenen

	♀
Length of body	22 mm
" " pronotum	5 "
" " elytra	30 "
" " hind femora	18 "
" " ovipositor	16 "

Locality: Australia, N. Territ. Brock's Creek, 22. 4. 32. 1 ♀, (type Mus. Basel).

This species is related to *longipenne* de Haan, but differs in the form of the ovipositor as indicated in the figures. (fig. 11).

Conocephalus carolinensis nov. spec.

♂, ♀: Size medium for the genus, form slender. General coloration pale green yellowish or greenish brown, vertex and pronotum with the usual, median reddish brown stripe, sometimes bordered on each side with a narrow yellowish stripe; sometimes less indicated or less distinct posteriorly or only yellowish brown from above.

Antennae long and slender, about four times as long as the body, reddish brown or yellowish, annulated with black at the apex of each joint.

Fastigium of vertex narrow, ascending anteriorly, its sides nearly parallel, seen in front not or scarcely widened.

Posterior margin of lateral lobe of pronotum nearly straight, callosity indistinct, slightly pro-

minent, small, roundly oval, humeral sinus less indicated.

Elytra narrow and narrowing apically, apex rounded, greenish or brownish, radial veins sometimes more greenish, without dark spots; in the male extending only a little beyond the apex of abdomen, much shorter than the hind femora, in the female a little longer, but not reaching the apex of hind femora; wings hyalinous, not or scarcely extending beyond the apex of elytra. In the macropterous form, elytra and wings extending a little beyond the apex, of hind femora, wings a little longer than elytra. The stridulating field in the left elytra of the male small, somewhat longer than broad, divided into two, unequal spaces as figured by fig. 12.



Fig. 12. *Conocephalus carolinensis* nov. sp. ♂.
Stridulating field of left elytra.

Fig. by Deenen

Prosternum bispinose. Abdomen yellowish or greenish brown, without dark spots or bands.

Anterior tibiae with a row of 5-6 spines from below on each side. Hind femora slender, with 3-5, small black spines on the outer lower mar-

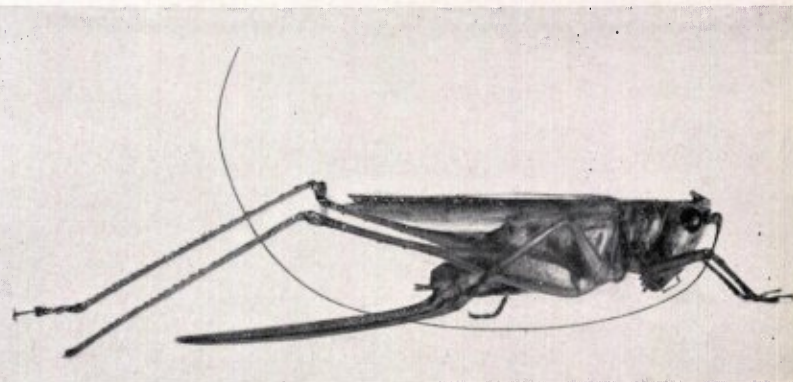


Fig. 13. *Conocephalus carolinensis* nov. sp.
♀ type.

Foto Deenen

gin, sometimes absent in one of the legs; knees fuscous, kneelobes bidentate on each side.

♂: Supra analplate broad, broader than long, hind margin broadly rounded, in the basal half with a V shaped low keel and a shallow median groove in the posterior part. Cercus slightly curved, apex more or less obtuse, viewed in side nearly straight, in the middle with a slightly inward curved sharp tooth. Subgenitalplate broader than long, posterior margin nearly straight, styli small, straight.

♀: Supra analplate small, triangular. Cercus short, straight, apex pointed. Ovipositor narrow, straight, as long as or a little shorter than the hind femora, variable in length.

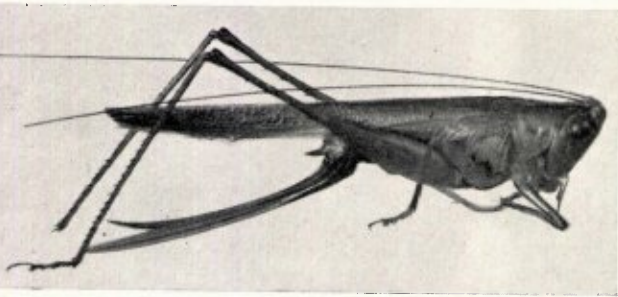


Fig. 14. *Conocephalus carolinensis* forma macroptera nov. ♀ type.

Foto Deenen

Subgenitalplate about as long as broad, margins narrowing posteriorly, posterior margin concavely excised, this plate tightly embracing the base of the ovipositor. Fig. 13, 14, 15.

	♂	♀
Length of body	10—14 mm	15—16 mm
" " pronotum	3—3,5 "	3,5 - 4 "
" " elytra	9,5-13 "	13—15 "
" " hind femora	11,5-14 "	14—17 "
" " ovipositor		10—17 "

	macropterous form	
	♂	♀
Length of body	16 mm	15 mm
" " pronotum	4 "	4 "
" " elytra	20 "	21 "
" " hind femora	13 "	14 "
" " ovipositor		15 "

Locality: Caroline Islands, Ponape 1. (Pounaran, Shikere, Ronkiti, Febr. and March 1936), Truk 1. (Dublon, Tarik, Tsis, Natsushima,



Fig. 15. *Conocephalus carolinensis* nov. sp. ♀ type, ovipositor.

Fig. by Deenen

Moen 1. Dec. 1935, Jan. 1936), Palao 1. (Melo-keiok, April 1936), Kusale 1. (Inshappa, Mt. Feukol, Mt. Wakapp, Jan. 1936).

The macropterous form was found on Ponape 1. (Roi, Wone, Febr. 1936). The collection contains 19 ♂♂ and 20 ♀♀. Type Mus. Basel.

This species runs in the key of Karny (loc. cit. p. 92) near *infumatus* Redt., but differs in the much shorter elytra, the absence of dark spots on the elytra and the longer ovipositor.

The type of *infumatus* is a female from the island Mioko and we have to wait on the examination of a topotypic male, to decide the relationship between *infumatus* and this new species. Attention is especially to be paid to the examination of the stridulating field in the left elytra and to the cerci.

Conocephalus maculatus Le Guillou 1841.

- 1841. *Xiphidium maculatum*, Le Guillou, Rev. Zool. vol. 4, p. 294.
- 1842. *Locusta (Xiphidium) lepida*, de Haan, Verh. Ned. Overz. Bezitt., Orth., p. 189.
- 1869. *Xiphidium lepidum*, Walker, Cat. Derm. Salt. B. M. II, p. 275.
Xiphidium maculatum, Walker, ibid. p. 275.
- 1871. *Xiphidium sinense*, Walker, ibid. V, suppl. p. 35.
- 1891. *Xiphidium maculatum*, Redtenbacher, Verh. zool.-bot. Ges. Wien, XLI, p. 515.
- 1893. *Xiphidium maculatum*, Brunner v. Wattenwyl, Ann. Mus. Civ. Stor. Nat. Genova, (2), XIII, p. 181.
- 1899. *Xiphidium maculatum*, Bolivar 1., Ann. Soc. Ent. de France, LXVIII, p. 779.
- 1902—05. *Xiphidium maculatum*, Jacobson and Bianchi, Orth. & Pseudoneuroptera Russian Empire, p. 385.
- 1906. *Anisoptera maculatum*, Kirby, Syn. Cat. Orth., II, p. 278.
- 1907. *Xiphidium maculatum*, Karny, Abh. zool.-bot. Ges. Wien, IV, p. 93.
- 1908. *Xiphidium maculatum*, Matsumura and Shiraki, Journ. Coll. Agric. Sapporo, III, p. 51.
- 1912. *Conocephalus (Xiphidium) maculatus*, Karny, Gen. Ins. fasc. 135, p. 11.
- 1914. *Conocephalus maculatus*, Bolivar 1, Asoc. Esp. Progr. Cienc. 4a, Ci. Nat., p. 213.
- 1915. *Xiphidium maculatum*, Bruner, Univ. Stud. Lincoln, XV, 2, p. 272.
- 1915. *Xiphidium maculatum*, Karny, Suppl. Entom. p. 74.
- 1920. *Xiphidium maculatum*, Karny, Zoolog. Meded., V, 4, pp. 170, 206.
- 1921. *Xiphidium maculatum*, Karny, Trop. Natuur, X, 5, p. 70, fig. 10.
- 1921. *Xiphidium maculatum*, Karny, Philipp. Journal Sci., XVIII, 5, p. 109.

1922. *Xiphidion maculatum*, Dammerman, Treubia, III, p. 109.
1922. *Conocephalus (Xiphidion) maculatus*, Hebard, Proc. Ac. Nat. Sci., Philad., LXXIV, p. 243.
1923. *Xiphidion maculatum*, Karny, Journ. Malayan Br. Roy. As. Soc., vol. I, p. 183.
- 1926 (25). *Xiphidion maculatum*, Karny, Journ. F. M. S. Mus., vol. XIII, p. 145.
1926. *Xiphidion maculatum*, Karny, Treubia, vol. IX, p. 185, 280.
1926. *Xiphidion maculatum*, Karny, ibid., vol. VII, p. 206.
1926. *Xiphidion maculatum*, Karny, ibid. vol. VIII, p. 313.
1926. *Xiphidion maculatum*, Fulmek, Misc. Zoolog Sumatr., I, p. 3.
1927. *Xiphidion maculatum*, Ebner, ibid., XX, p. 2.
1927. *Xiphidion maculatum*, Karny, Arkiv. f. Zoolog., Bd. 19 A, p. 10.
1927. *Conocephalus maculatus*, Uvarov, Spolia Zeyl XIV, p. 91.
1928. *Xiphidion maculatum*, Ebner, Treubia, vol. X, p. 53.
1930. *Conocephalus (Xiphidion) maculatus*, Furukawa, Bull. Biogeogr. Soc. of Japan, vol. I, p. 233.
1931. *Xiphidion maculatum*, Karny, Treubia, vol. XII, suppl. p. 103 Fig. 49. (left).
1932. *Conocephalus (Xiphidion) maculatus*, Henry, Ceylon Journ. Sc., Sect. B., vol. XVI, p. 242.
1933. *Conocephalus (Xiphidion) maculatus*, Uvarov, Arkiv. f. Zoolog., Bd. 26A, no. 1, p. 6.
1933. *Xiphidion maculatum*, Willemse, Mém. Mus. Royal Hist. Nat. d. Belg., hors sér., vol. IV, fasc. 8, p. 13.
1935. *Xiphidion maculatum*, Bey Bienko, Philip. Journ. Sc. vol. 57, p. 404.
1938. *Conocephalus (Xiphidion) maculatus*, Chang, Mus. Heude, Notes d'Entom. Chin. vol. II, 3, p. 48.
1936. *Conocephalus maculatus*, Tinkham, Lingn. Sc. Journal, vol. 15, p. 213.
1938. *Conocephalus (Xiphidion) maculatus*, Furukawa, Annot. Zoolog. Japon., vol. 17, no. 3/4, p. 559.
1939. *Conocephalus (Xiphidion) maculatus*, Ebner, Lingn. Science Journ. vol. 18, 3, p. 296.

Locality: Caroline Isl. Palao Isl. Gukipp 20.IV.36, 1 ♀ (Mus. Honolulu).

Till now this species was not known from the Caroline islands. Its geographical distribution is very large and extends from Africa and Madagascar to East and South Asia and the whole of the Malay Archipelago. It is one of the most common species. It is not impossible that there are

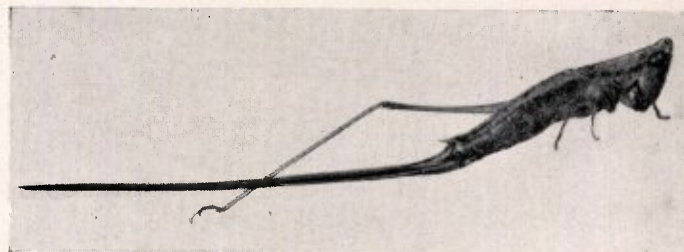


Fig. 16. *Conocephalus vaginatus* nov. spec.
♀ type.

Foto Deenen

more geographical races and a thorough revision of this genus is needed.

Conocephalus vaginatus nov. spec.

♀: Size medium, form slender. General coloration yellowish brown, vertex and pronotum from above with the usual median, reddish brown stripe, bordered by a narrow yellow stripe, continuing on the dorsum of abdomen. Behind the eye with a narrow blackish brown postocular band, continuing on the middle of the lateral lobe of pronotum and on the sides of the abdomen. Antennae missing. Fastigium of vertex ascending anteriorly, its sides distinctly widening, seen in front distinctly widened. Lateral lobes of pronotum relatively short, posterior margin oblique, straight, humeral sinus absent, callosity small, oval.

Elytra and wings absent. Mesonotum near the lower margin with some rough sculpturation. Prosternum unarmed.

Anterior tibiae with a row of 4—5 spines from below on each side.

Hind femora slender, without spines on the lower margin, knees unicolorous, kneelobes bidentate on each side.

♀: Supra analplate triangular, apex rounded. Cercus straight, short, conical, apex pointed. Ovipositor extremely long, more than 2 times as long as the hind femora, nearly straight, narrow.

Subgenital plate longer than broad, sides narrowing posteriorly, posterior margin narrowly rounded. ♂ unknown. Fig. 16.

	♀
Length of body	14 mm
" " pronotum	2,5 "
" " hind femora	12 "
" " ovipositor	27 "

Locality: Australia, N. Territ. Murrumbidgee, May 1931, 1 ♀, (E. Handschin). Type Mus. Basel.

This species is at once distinguished from all the other known Indo-Malayan and Australian species by the absence of elytra and the extremely long ovipositor, besides by the unarmed prosternum. Perhaps a new genus but the male is still unknown.

(Is continued).