Stuttgarter Beiträge zur Naturkunde
Serie A (Biologie)

Herausgeber:

Staatliches Museum für Naturkunde, Rosenstein 1, D-70191 Stuttgart

Stuttgarter Beitr. Naturk.	Ser. A	Nr. 546	14 S.	Stuttgart, 30. 10. 1996

New taxonomic and faunistic data on *Agathidium* from South East Asia (Coleoptera: Leiodidae: Agathidiini)

By Fernando Angelini, Francavilla Fontana

With 32 figures

Summary

Descriptive and/or collecting data are presented for 28 species (138 specimens) of *Agathidium* found in South-East Asia and preserved in the Staatliches Museum für Naturkunde in Stuttgart. – New species: *Agathidium* (s. str.) *riedeli* **n. sp.** and *A.* (s. str.) *proximum* **n. sp.** from India (Uttar Pradesh), *A.* (*Euryceble*) *acridulum* **n. sp.** and *A.* (*Euryceble*) *leytense* **n. sp.** from the Philippines. – New records: *Agathidium barahbisense* Ang. & Dmz. from Himachal Pradesh; *A. garhwalense* Ang. & Dmz. from Tamil Nadu – doubtful provenance; *A. luctuosum* Ang. & Dmz. – doubtful determination – and *A. carinense* Ang. from Sumatra; *A. indefinitum* Ang. & Dmz., *A. quadrimaculatum* Ang. & Dmz. and *A. argutum* Ang. & Dmz. from Sarawak; *A. crockerense* Ang. & Dmz. and *A. hammondi* Ang. & Coot. from the Philippines.

Zusammenfassung

Von 28 Arten (138 Exemplare) der Gattung *Agathidium* aus Südost-Asien werden neue taxonomische und faunistische Daten geliefert. Hinsichtlich der neu beschriebenen Arten und der neuen faunistischen Nachweise siehe „Summary".

1. Introduction, material and acknowledgments

I present here further distributional and taxonomic data on *Agathidium* from South-East Asia. They arise from the study of 138 specimens, representing 28 species, collected by A. Riedel (Munich), J. Trautner, K. Geigenmuller (both Filderstadt) and Dr. W. Schawaller in:

– 5 localities in India, Uttar Pradesh: 23 specimens, 5 species, leg. Riedel;
– 1 locality in India, Himachal Pradesh: 10 specimens, 1 species, leg. Riedel;
– 3 localities in India, Tamil Nadu and Kerala: 26 specimens, 3 species, leg. Riedel;
– 3 localities in Malaysia, Malaya: 10 specimens, 4 species, leg. Riedel;
– 1 locality in Thailand; 8 specimens, 3 species, leg. Trautner & Geigenmuller;
– 1 locality in Viet Nam: 1 specimen, 1 species, leg. Medvedev & Golovatch;

– 7 localities in Indonesia (Sumatra, Sarawak): 22 specimens, 9 species, leg. RIEDEL;
– 2 localities in the Philippines (Leyte Island): 36 specimens, 5 species, leg. SCHAWALLER & TRAUTNER.

Material

This material includes:
a) 4 new species: *Agathidium* (s. str.) *riedeli* n. sp. and *A.* (s. str.) *proximum* n. sp. from India (Uttar Pradesh), *A.* (*Euryceble*) *acridulum* n. sp. and *A.* (*Euryceble*) *leytense* n. sp. from the Philippines.
b) 9 species newly recorded for: India, Himachal Pradesh: *Agathidium barahbisense* Ang. & Dmz.; – India, Tamil Nadu: *A. garhwalense* Ang. & Dmz. (doubtful provenance); – Sumatra: *A. luctuosum* Ang. & Dmz. (doubtful determination) and *A. carinense* Ang.; – Sarawak: *A. indefinitum* Ang. & Dmz., *A. quadrimaculatum* Ang. & Dmz. and *A. argutum* Ang. & Dmz.; – Philippines: *A. crockerense* Ang. & Dmz. and *A. hammondi* Ang. & Coot.

The treated material is deposited in the Staatliches Museum für Naturkunde in Stuttgart (*SMNS*) and ANGELINI's collection (*AC*).

Acknowledgments

I thank Dr. WOLFGANG SCHAWALLER (Stuttgart) allowing me to study the material and my friend JONATHAN COOTER (Hereford, England) for reading the manuscript.

2. Species list

2.1. *Agathidium* (s. str.) sp. prope *luctuosum* Ang. & Dmz.

Agathidium (s. str.) *luctuosum* Angelini & De Marzo, 1993: 430.

Material: Indonesia, W Sumatra, Bukittinggi, Lembah Anai, 800 m, 16. X. 1991, leg. RIEDEL, 1 ♀ (SMNS).

Discussion: These new specimens differ from the type series in having a more superficial microreticulation on head and pronotum and in the colour of the antennae, with segments 1–8 testaceus; the spermathecae are very similar. The attribution of this specimen to *A. luctuosum* Ang. & Dmz. is for these reasons doubtful.

Distribution: Malaysia (Sabah), ? Indonesia (Sumatra). New record from Indonesia (Sumatra).

2.2. *Agathidium* (s. str.) *wheeleri* Ang.

Agathidium (s. str.) *wheeleri* Angelini, 1990: 244; ANGELINI & DE MARZO, 1993: 434.

Material: Indonesia, W Sumatra, Bukittinggi, Panti, 700 m, 25.–26. X. 1991, leg. RIEDEL, 1 ♀ (SMNS); – Bukittinggi, Batang, Palupuh, 1000–1500 m, 19. X. 1991, leg. RIEDEL, 1 ♀ (AC).

Discussion: The new specimens agree in all characters to the types.

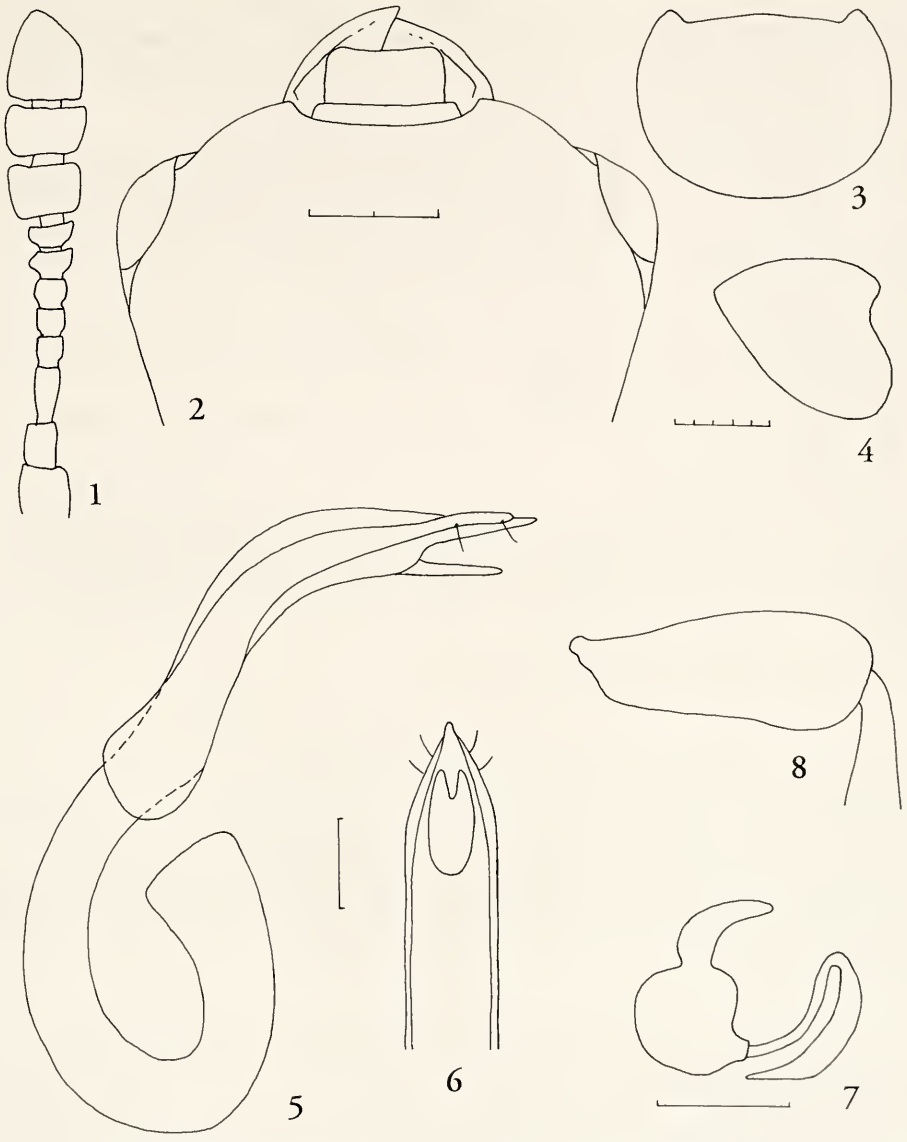
Distribution: Indonesia (Sumatra), Malaysia (Malaya).

2.3. *Agathidium* (s. str.) *riedeli* n. sp. (Figs. 1–8)

Holotype ♂: India, Uttar Pradesh, Rishikesh, Laxman Bridge, 3.–4. VII. 1989, leg. RIEDEL (SMNS).

Paratypes: Same data as holotype, 2 ♀♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Description: Length 2.85–2.90 mm (holotype ♂: 2.90 mm). Dorsum dark reddish-brown, or black with lighter sides, venter dark reddish-brown, mesosternum



Figs. 1–8. *Agathidium* (s. str.) *riedeli* n. sp. – 1. Antenna; – 2. head; – 3-4. pronotum in dorsal and lateral view; – 5-6. apex of aedeagus in lateral and ventral view; – 7. spermatheca; – 8. male hind femora. – Scale in Figs. 1, 2, 8 = 0.2 mm, in 3, 4 = 0.5 mm, in 5, 6, 7 = 0.1 mm.

lighter; antennae uniformly testaceous; legs reddish-brown, microsculpture absent, or only vague traces on elytra; puncturation fine and sparse on whole dorsum.

Head: Punctures small, superficial, spaced from each other by 3–6 times their own diameter. Widest at eyes; antero-lateral margins raised; eyes suboblong; clypeal margin moderately excavate (fig. 2); clypeal line absent. 3rd antennal segment 1.35 times as long as the 2nd and as long as 4th+5th together (fig. 1).

Pronotum: Punctures a little smaller and more superficial than those of the head, spaced from each other by 5–10 times their own diameter. 1.51 times as broad as head, moderately broader than long (W/L = 1.54) and moderately convex (W/H = 1.60); anterior margin slightly curved (fig. 3); lateral outline broadly curved (fig. 4). Holotype: length 0.88 mm, width 1.36 mm, height 0.85 mm.

Elytra: Microreticulation absent, or only vague traces; punctures small and superficial as on pronotum, but spaced from each other by 1–10 times their own diameter, a few larger punctures are interspersed. Nearly as broad as pronotum, moderately longer than broad (W/L = 0.92) and moderately convex (W/H = 1.73); lateral outline with very weak humeral angle; sutural striae absent. Holotype: length 1.40 mm, width 1.30 mm, height 0.75 mm.

Metathoracic wings: present. Meso- and metasternum: median carina clear, lateral lines absent, femoral lines incomplete.

Legs: Male hind femora untoothed (fig. 8). Tarsal formula: ♂ 5-5-4, ♀ 5-4-4.

Aedeagus as in figs. 5–6.

Spermatheca as in fig. 7.

Discussion: *A. riedeli* n. sp. (*madurense* group) is very similar to *A. brahmano* Ang. & Dmz. (1986: 430, Assam) and *A. separatum* Ang. (1991: 167, Burma) in antenna colour, body length, ratio 3rd/2nd of antennal segments; the characters displayed by the aedeagus are markedly different from those of *brahmano* and *separatum*.

Distribution: India (Uttar Pradesh).

2.4. *Agathidium* (s. str.) *barahbisense* Ang. & Dmz.

Agathidium (s. str.) *barahbisense* Angelini & De Marzo, 1985: 51.

Material: India, Himachal Pradesh, Simla, Kufri, 16. IV. 1989, leg. Riedel, 2 ♂♂ and 1 ♀ (SMNS); – same locality, 16. VII. 1989, 3 ♂♂ and 2 ♀♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types.

Distribution: India (Himachal Pradesh), Nepal. New record for India (Himachal Pradesh).

2.5. *Agathidium* (s. str.) *kashmirense* Ang. & Dmz.

Agathidium (s. str.) *kashmirense* Angelini & De Marzo, 1981: 238; 1983: 9; 1985: 54; Angelini & Stephenson, 1990: 121.

Material: India, Uttar Pradesh, Mussorie, Dhanolti, 2250 m, 11. VII. 1989, leg. Riedel, 1 ♂ and 3 ♀♀ (SMNS), 1 ♂ (AC); – same locality, 2500 m, 12. VII. 1989, leg. Riedel, 1 ♀ (SMNS); – same locality, 2250 m, 11.–13. VII. 1989, leg. Riedel, 1 ♂ (SMNS).

Discussion: These new specimens agree fully with the description of the types, except in the colour of the dorsum, which is dark reddish-brown or black.

Distribution: India (Kashmir, Himachal Pradesh, Uttar Pradesh, Kumaon, Garhwal).

2.6. *Agathidium* (s. str.) *garhwalense* Ang. & Dmz.

Agathidium (s. str.) *garhwalense* Angelini & De Marzo, 1983: 158.

Material: India, Tamil Nadu, Mysore, Pykara, Octakamund, 2100 m, 20.–21. VIII. 1989, leg. Riedel, 4 ♂♂ and 6 ♀♀ (SMNS), 1 ♂ and 1 ♀ (AC).

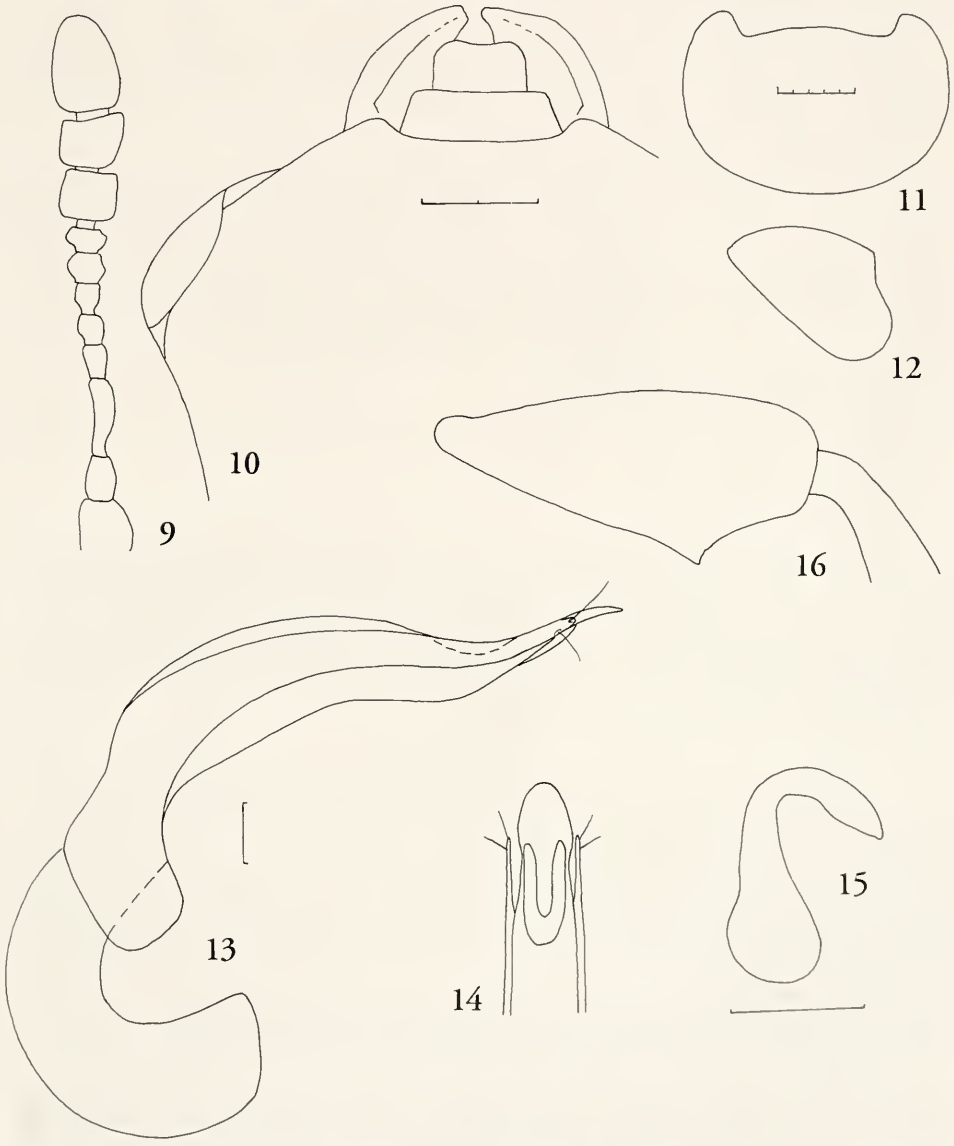
Discussion: These new specimens agree fully with the description of the types.

Distribution: India (Uttar Pradesh, Garhwal, Tamil Nadu). Possible new record from Tamil Nadu (decentralized locality, could be a labelling error).

2.7. *Agathidium* (s. str.) *proximum* n. sp. (Figs. 9–16)

Holotype ♂: India, Uttar Pradesh, Joshimat, Ghangaria, 2700 m, 4. VIII. 1989, leg. Riedel (SMNS).

Paratypes: Same data as holotype, 1 ♀ (SMNS), 1 ♀ (AC).



Figs. 9–16. *Agathidium* (s. str.) *proximum* n. sp. – 9. Antenna; – 10. head; – 11-12. pronotum in dorsal and lateral view; – 13-14. apex of aedeagus in lateral and ventral view; – 15. spermatheca; – 16. male hind femora. – Scale in Figs. 9, 10, 16 = 0.2 mm, in 11, 12 = 0.5 mm, in 13, 14, 15 = 0.1 mm.

Description: Length 3.2–3.4 mm (holotype ♂: 3.4 mm). Whole dorsum dark reddish-brown; venter reddish-brown, mesosternum testaceous; antennae uniformly testaceous; legs reddish-brown. Microreticulation superficial but uniform only on elytra; punctures small and superficial on head and pronotum, nearly absent on elytra.

Head: Punctures small, well impressed, spaced from each other by 1–5 times their own diameter. Widest at eyes (fig. 10); eyes suboblong; clypeus sharply excavated; clypeal line absent. 3rd antennal segment 1.75 times as long as the 2nd and longer than 4th+5th together (fig. 9).

Pronotum: Puncturation as that of head. 1.37 times as broad as head, moderately broader than long (W/L = 1.70) and a little convex (W/H = 1.88). Anterior margin slightly curved (fig. 11); lateral outline broadly curved (fig. 12). Holotype: length 1.00 mm, width 1.70 mm, height 0.90 mm.

Elytra: Microreticulation superficial but uniform on whole surface, long and irregular furrow interposed; punctures smaller and more superficial than on head, hardly visible, spaced from each other by 5–15 times their own diameter. Just a little broader than pronotum, slightly broader than long (W/L = 1.10) and slightly convex (W/H = 1.87); lateral outline with broadly rounded humeral angle; sutural striae absent. Holotype: length 1.50 mm, width 1.65 mm, height 0.88 mm.

Metathoracic wings present. Meso- and metasternum: median carina clear, lateral lines absent, femoral lines incomplete.

Legs: Male hind femora with a large tooth at posterior margin (fig. 16). Tarsal formula: ♂ 5-5-4, ♀ 5-4-4.

Aedeagus as in figs. 13–14.

Spermatheca as in fig. 15.

Discussion: *Agathidium proximum* n. sp. (*laevigatum* group) is very similar to *A. rufifrons* Ang. & Dmz. (1985: 60, Nepal) in possessing superficial microreticulation on elytra and in length ratio 3rd/2nd antennal segments; it differs in body length, lighter colour of dorsum, lower width ratio of pronotum/head and presence of metathoracic wings.

Distribution: India (Uttar Pradesh).

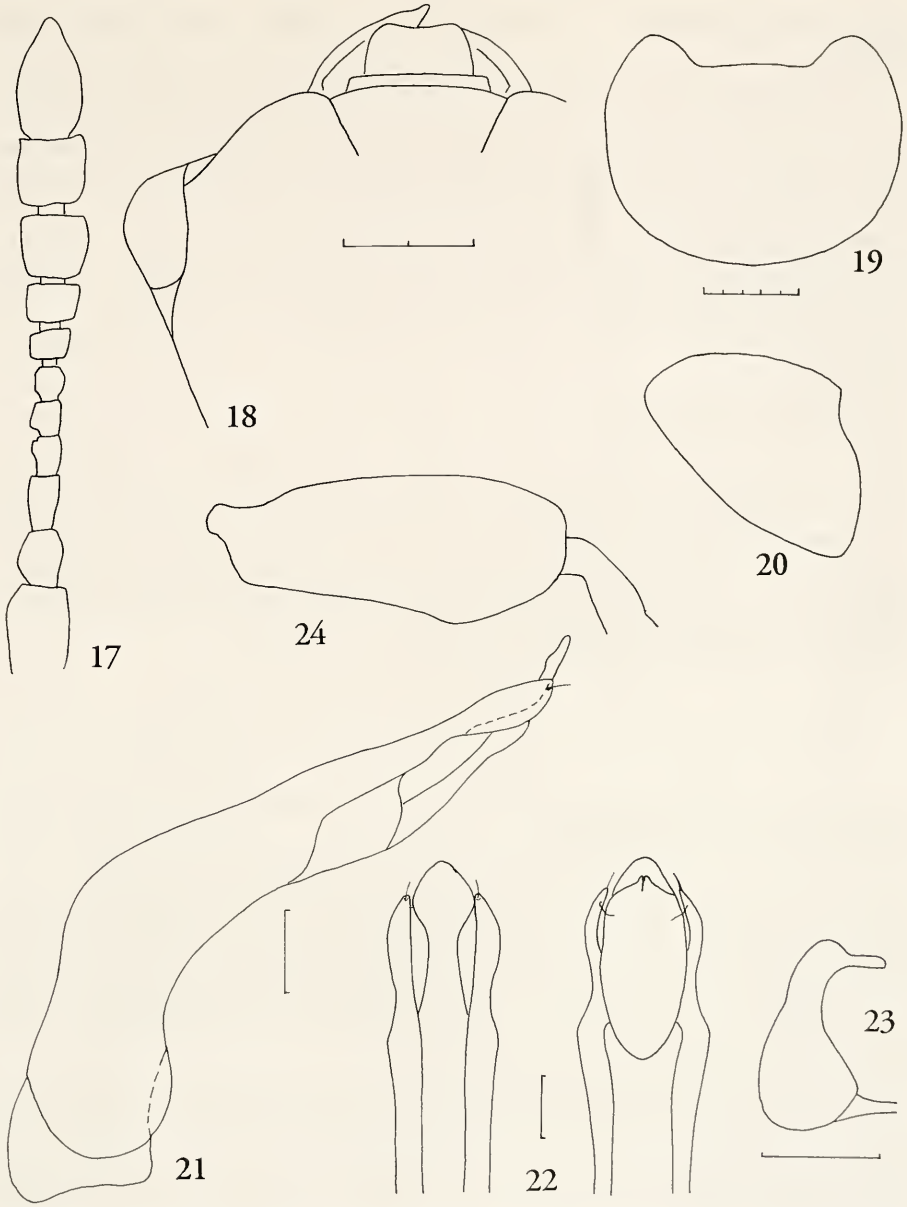
2.8. *Agathidium* (*Euryceble*) *acridulum* **n. sp.** (Figs. 17–24)

Holotype ♂: Philippines, Leyte, Lake Danao, forest edge, 500 m, 19. II.–8. III. 1991, leg. Schawaller & Trautner (SMNS).

Paratypes: Same data as holotype, 1 ♂ (SMNS), 1 ♂ and 1 ♀ (AC); – Leyte, Visca N Baybay, primary forest, 200–500 m, 22. II.–10. III. 1991, leg. Schawaller & Trautner, 1 ♂ (SMNS); – Leyte, Visca N Baybay, cultivated land, 22. II.–10. III. 1991, leg. Schawaller & Trautner, 1 ♂ (SMNS).

Description: Length 3.0–3.2 mm (holotype ♂: 3.1 mm). Dorsum dark reddish-brown, elytra in some paratypes with black veining, venter reddish-brown, mesosternum lighter; antennae with segments 7–10 darker; legs reddish-brown. Head distinctly wrinkled, pronotum with superficial microreticulation, elytra with traces of microreticulation; puncturation fine and sparse on whole dorsum.

Head: Wrinkles clear but superficial on whole dorsum; punctures small, superficial, spaced from each other by 1–20 times their own diameter. Widest at eyes (fig. 18); eyes protuberant; antero-lateral margins distinctly raised; clypeal margin weak-



Figs. 17–24. *Agathidium* (*Euryceble*) *acridulum* n. sp. – 17. Antenna; – 18. head; – 19-20. pronotum in dorsal and lateral view; – 21-22. apex of aedeagus in lateral view and dorsal/ventral view; – 23. spermatheca; – 24. male hind femora. – Scale in Figs. 17, 18, 24 = 0.2 mm, in 19, 20 = 0.5 mm, in 21, 22, 23 = 0.1 mm.

ly excavate; one large fovea and a short groove at each side of clypeus. 3rd antennal segment as long as the 2nd and shorter than 4th+5th together (fig. 17).

Pronotum: Microreticulation superficial and uniform; punctures small, superficial, as on head. 1.6 times as broad as head, moderately broader than long (W/L = 1.40) and very convex (W/H = 1.40); anterior margin weakly curved (fig. 19); lateral

outline broadly curved (fig. 20). Holotype: length 1.10 mm, width 1.54 mm, height 1.10 mm.

Elytra: Microreticulation absent, or only vague traces; punctures just a little larger than those of head, superficial, spaced from each other by 1–20 times their own diameter. As broad as pronotum, moderately broader than long (W/L = 1.10) and very convex (W/H = 1.47); lateral outline with weak humeral angle; sutural striae absent. Holotype: length 1.40 mm, width 1.55 mm, height 1.05 mm.

Metathoracic wings present, short, longer than elytra. Meso- and metasternum: median carina clear, lateral lines absent, femoral lines incomplete, short; a small tubercle between the metacoxae.

Legs: Male hind femora widened at posterior margin (fig. 24). Tarsal formula: ♂ 5-5-4, ♀ 5-4-4.

Aedeagus as in figs. 21–22.

Spermatheca as in fig. 23.

Discussion: *A. acridulum* n. sp. is very similar to *A. montuosum* Ang. & Dmz. (1993: 438, Sumatra) and *A. leytense* n. sp. in possessing a short groove at each side of clypeus; it differs from *A. montuosum* by the lesser length ratio of 3rd/2nd antennal segments, by the head entirely wrinkled and pronotum with microreticulation; from *leytense* n. sp. it differs by the lesser length ratio of 3rd/2nd antennal segments, colour of the antennae and antennal club of the three segments.

Distribution: Philippines (Leyte Island).

2.9. *Agathidium* (*Euryceble*) *leytense* **n. sp.** (Figs. 25–32)

Holotype ♂: Philippines, Leyte, Lake Danao, forest edge, 500 m, 19. II.–8. III. 1991, leg. Schawaller & Trautner (SMNS).

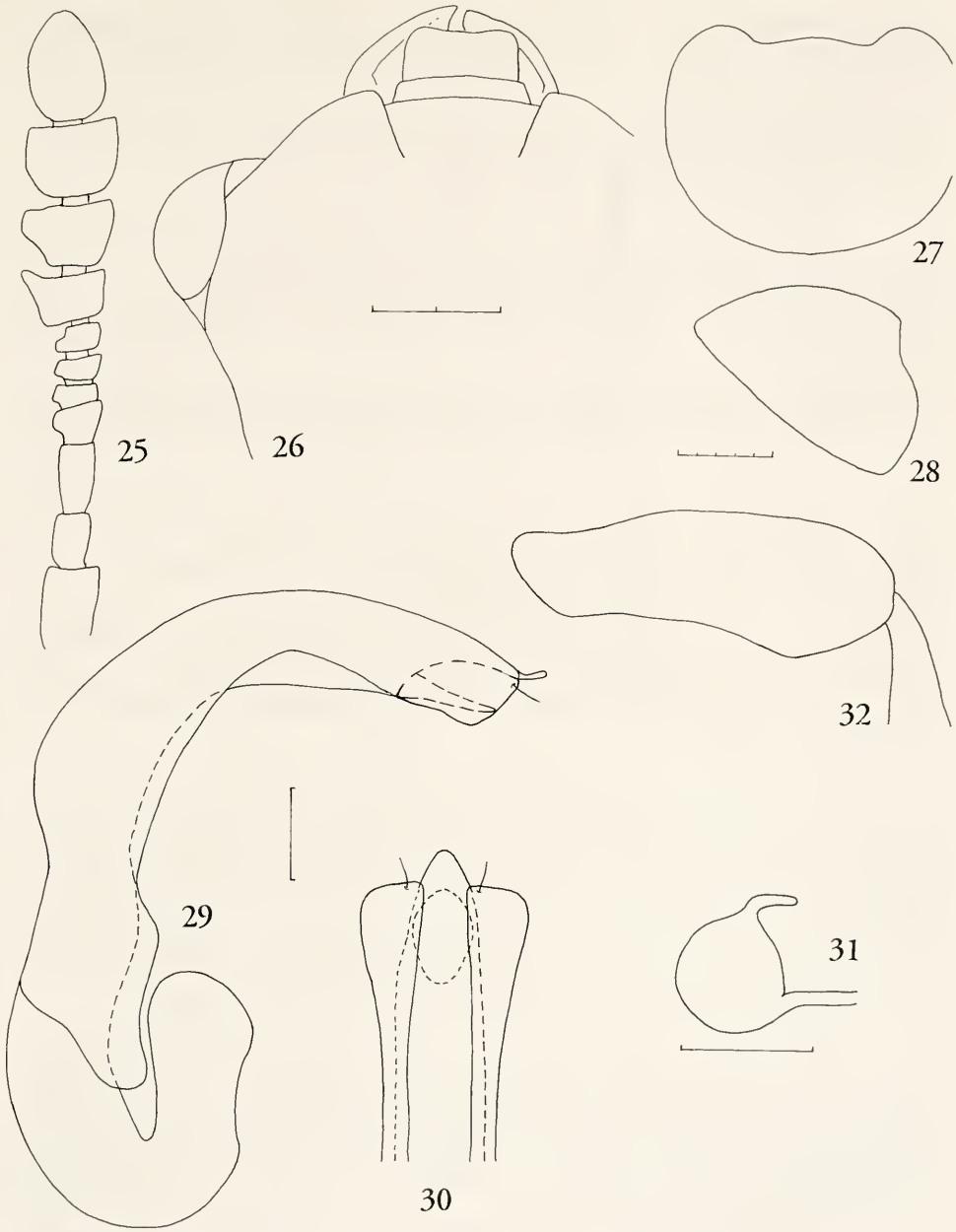
Paratypes: Same data as holotype, 1 ♂ and 4 ♀♀ (SMNS), 2 ♂♂ and 1 ♀ (AC).

Description: Length 3.10–3.35 mm (holotype ♂: 3.30 mm). Dorsum dark reddish-brown, elytra in some paratypes with black veining or black and with sides lighter, venter reddish-brown, mesosternum lighter; antennal club of 4 segments; antennal segments 4–7 or 4–9 darker; legs reddish-brown. Head distinctly wrinkled, pronotum with superficial microreticulation, elytra with traces of microreticulation; puncturation fine and sparse on whole dorsum.

Head: Wrinkles clear but superficial, more impressed on clypeus; punctures small, superficial, spaced from each other by 2–6 times their own diameter. Widest at eyes; eyes protuberant (fig. 26); antero-lateral margins distinctly raised; clypeal margin weakly excavate; one large fovea and a short groove at each side of clypeus. 3rd antennal segment 1.4 times as long as the 2nd and longer than 4th+5th together (fig. 25).

Pronotum: Microreticulation superficial and uniform; punctures small and superficial as on head but spaced from each other by 4–6 times their own diameter. 1.48 times as broad as head, moderately broader than long (W/L = 1.40) and very convex (W/H = 1.49), anterior margin weakly curved (fig. 27); lateral outline broadly curved (fig. 28). Holotype: length 1.12 mm, width 1.57 mm, height 1.05 mm.

Elytra: Microreticulation absent or only vague traces; punctures very small, superficial, spaced from each other by 6–10 times their own diameter. Slightly broader than pronotum, moderately broader than long (W/L = 1.06) and moderately convex



Figs. 25–32. *Agathidium* (*Euryceble*) *leytense* n. sp. – 25. Antenna; – 26. head; – 27-28. pronotum in dorsal and lateral view; – 29-30. apex of aedeagus in lateral and dorsal view; – 31. spermatheca; – 32. male hind femora. – Scale in Figs. 25, 26, 32 = 0.2 mm, in 27, 28 = 0.5 mm, in 29, 30, 31 = 0.1 mm.

(W/H = 1.77); lateral outline with weak humeral angle; sutural striae absent. Holotype: length 1.50 mm, width 1.60 mm, height 0.90 mm.

Metathoracic wings present. Meso- and metasternum: median carina weak, lateral lines absent, femoral lines incomplete, short; a small tubercle between the metacoxae.

Legs: Male hind femora widened at posterior margin (fig. 32). Tarsal formula: ♂ 5-5-4, ♀ 5-4-4.

Aedeagus as in figs. 29–30.

Spermatheca as in fig. 31.

Discussion: See discussion of *A. acridulum* n. sp.

Distribution: Philippines (Leyte Island).

2.10. *Agathidium* (*Microceble*) *indefinitum* Ang. & Dmz.

Agathidium (*Microceble*) *indefinitum* Angelini & De Marzo, 1993: 452.

Material: Malaysia, Sarawak, Kuching, Santubong, 26. III. 1990, leg. Riedel, 1 ♂ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.

Distribution: Malaysia (Sabah, Sarawak). New record for Sarawak.

2.11. *Agathidium* (*Microceble*) *crockerense* Ang. & Dmz.

Agathidium (*Microceble*) *crockerense* Angelini & De Marzo, 1993: 458.

Material: Philippines, Leyte, Visca, N Baybay, primary forest, 200–300 m, 2.–10. III. 1991, leg. Schawaller & Trautner, 2 ♂♂ (SMNS), 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types, except in colour of dorsum which is uniformly dark reddish-brown.

Distribution: Malaysia (Sabah), Indonesia (Sumatra, Java), Philippines. New record for the Philippines.

2.12. *Agathidium* (*Microceble*) *quadrimaculatum* Ang. & Dmz.

Agathidium (*Microceble*) *quadrimaculatum* Angelini & De Marzo, 1993: 460.

Material: Malaysia, Sarawak, Kuching, Santubong, 26. III. 1990, leg. Riedel, 1 ♂ (SMNS).

Discussion: This new specimen differs from the types in colour of dorsum, which is uniformly black, without reddish-brown spots.

Distribution: Malaysia (Sabah, Sarawak). New record for Sarawak.

2.13. *Agathidium* (*Microceble*) *abiectum* Ang. & Dmz.

Agathidium (Microceble) abiectum Angelini & De Marzo, 1993: 464.

Material: Indonesia, W Sumatra, Bukittinggi, Batang, Palupuh, 1000–1500 m, 19. X. 1991, leg. Riedel, 3 ♂♂ and 1 ♀ (SMNS), 1 ♂ and 1 ♀ (AC); – Bukittinggi, Gunong Singgalang, 2100–2600 m, 16. X. 1990, leg. Riedel, 1 ♀ (SMNS).

Discussion: These new specimens differ from the types in possessing a superficial microreticulation on head and pronotum (only traces in types); length 2.20–2.50 mm.

Distribution: Indonesia (Sumatra).

2.14. *Agathidium* (*Microceble*) *darbyi darbyi* Ang. & Coot.

Agathidium (s. str.) *darbyi* Angelini & Cooter, 1985: 132.
Agathidium (*Microceble*) *darbyi*: Angelini & De Marzo, 1986: 453.
Agathidium (*Microceble*) *darbyi darbyi*: Angelini & De Marzo, 1993: 470.

Material: Indonesia, W Sumatra, Bukittinggi, Panti, 700 m, 25.–26. X. 1991, leg. Riedel, 1 ♂ and 1 ♀ (SMNS); – Philippines, Leyte, Lake Danao, forest edge, 500 m, 19. II.–8. III. 1991, leg. Schawaller & Trautner, 2 ♂♂ and 7 ♀♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types.
Distribution: Indonesia (Sumatra), Malaysia (Sarawak, Sabah), Philippines.

2.15. *Agathidium* (*Microceble*) *carinense* Ang.

Agathidium (*Microceble*) *carinense* Angelini, 1992b: 205.

Material: Indonesia, W Sumatra, Bukittinggi, Batang, Palupuh, 1400–1500 m, 19. X. 1991, leg. Riedel, 1 ♀ (SMNS); – Bukittinggi, Panti, 700 m, 25.–26. X. 1991, leg. Riedel, 1 ♀ (SMNS), 2 ♀♀ (AC).

Discussion: *A. carinense* Ang. was described on the basis of a single ♀; the new specimens agree fully with the description of the type; length 3.30–3.55 mm, elytra with traces of microreticulation.
Distribution: Burma, Indonesia (Sumatra). New record for Indonesia (Sumatra).

2. 16. *Agathidium* (*Microceble*) *argutum* Ang. & Dmz.

Agathidium (*Microceble*) *argutum* Angelini & De Marzo, 1993: 470.

Material: Malaysia, Sarawak, Belaga Distr., Long Lihau, 17.–21. III. 1990, leg. Riedel, 1 ♀ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.
Distribution: Malaysia (Sabah, Sarawak). New record for Sarawak.

2.17. *Agathidium* (*Microceble*) *fumosum* Ang. & Dmz.

Agathidium (*Microceble*) *fumosum* Angelini & De Marzo, 1993: 479.

Material: Indonesia, W Sumatra, Medan, Kabanjahe, Gunong Sinabung, 2000 m, 7.–8. X. 1990, leg. Riedel, 2 ♀♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types.
Distribution: Indonesia (Sumatra).

2.18. *Agathidium* (*Microceble*) *maculicolle* Champ.

Agathidium maculicolle Champion, 1924: 161; Hatch, 1929: 81.
Agathidium (s. str.) *maculicolle*: Angelini & De Marzo, 1985: 69.
Agathidium (*Microceble*) *maculicolle*: Angelini & De Marzo, 1986: 454.

Material: India, Uttar Pradesh, Mussorie, Rabbit Farm, 1300 m, 10. VII. 1989, leg. Riedel, 3 ♂♂ (SMNS), 1 ♂ and 1 ♀ (AC); – Mussorie, 1300 m, 9.–10. VII. 1989, leg. Riedel 1 ♂ (SMNS).

Discussion: These new specimens agree fully with the redescription of the types (Angelini & De Marzo, 1985: 69).
Distribution: India (Uttar Pradesh, Kumaon).

2.19. *Agathidium* (*Microceble*) sp. prope *laticorne* Port.

Agathidium (*Cyphoceble*) *laticorne* Portevin, 1922: 58.
Agathidium (s. str.) *laticorne*: Hatch, 1929: 66; Hlisnikovsky, 1964: 200; Angelini & De Marzo, 1983: 162.
Agathidium (*Microceble*) *laticorne*: Angelini & De Marzo, 1986: 442.

Material: India, Uttar Pradesh, Rishikesh, Laxman Bridge, 3.–4. VII. 1989, leg. Riedel, 1 ♀ (SMNS), 1 ♂ (AC); – Thailand, Amphoe Chiang Dao, Doi Chiang Dao, 1700 m, 9. I. 1989, leg., Trautner & Geigenmüller, 3 ♂♂ and 1 ♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Discussion: The specimens from Thailand are similar to the types in external characters and aedeagus but they differ in shape of the spermatheca (see Angelini & De Marzo, 1989: 471, fig. 34); the ♂ of Uttar Pradesh differs in having the aedeagus narrower at the middle, the spermatheca and external characters are similar to the type.

Distribution: Pakistan, India (Assam, Meghalaya, Darjeeling, Orissa, Uttar Pradesh, Garhwal, Kumaon, Kerala, Tamil Nadu), Sri Lanka, Nepal, Bhutan, Thailand, Viet Nam, Malaysia (Malaya, Singapore, Sarawak, Sabah), Indonesia (Java, Sumatra).

2.20. *Agathidium* (*Microceble*) *saudersi* Ang. & Cooter

Agathidium (s. str.) *saudersi* Angelini & Cooter, 1986: 37.
Agathidium (*Microceble*) *saudersi*: Angelini & De Marzo, 1986: 454.

Material: Viet Nam, Vinh-Phu Prov., Tamdao, 800–1200 m, 12.–22. IV. 1986, leg. Medvedev & Golovatch, 1 ♀ (AC); – Malaysia, Malaya, Taiping, Maxwell Hill, 10. IV. 1990, leg. Riedel, 1 ♀ (SMNS).

Discussion: These new specimens agree fully with the description of the types.
Distribution: Malaysia (Malaya, Singapore), Viet Nam.

2.21. *Agathidium* (*Microceble*) *manasicum* Ang. & Dmz.

Agathidium (*Microceble*) *manasicum* Angelini & De Marzo, 1986: 445; 1989: 477; Angelini 1992a: 209.

Material: Thailand, Amphoe Chiang Dao, 1700 m, 9. I. 1989, leg. Trautner & Geigenmüller, 1 ♂ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.
Distribution: India (Assam), Thailand.

2.22. *Agathidium* (*Microceble*) *infuscatum* Ang. & Dmz.

Agathidium (*Microceble*) *infuscatum* Angelini & De Marzo, 1989: 473; Angelini 1992a: 209.

Material: Thailand, Amphoe Chiang Dao, Doi Chiang Dao, 1700 m, 9. I. 1989, leg. Trautner & Geigenmüller, 1 ♂ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.
Distribution: Thailand.

2.23. *Agathidium* (*Microceble*) *hammondi* Ang. & Cooter

Agathidium (s. str.) *hammondi* Angelini & Cooter, 1985: 130.
Agathidium (*Microceble*) *hammondi*: Angelini & De Marzo, 1986: 454; 1993: 487; Angelini 1992b: 212.

Material: Philippines, Leyte, Lake Danao, forest edge, 500 m, 19. II.–8. III. 1991, leg. Schawaller & Trautner, 1 ♂ and 1 ♀ (SMNS), 1 ♂ (AC).

Discussion: These new specimens agree fully with the description of the types.
Distribution: Malaysia (Singapore, Sarawak, Sabah), Indonesia (Sumatra), Philippines. New record for Philippines.

2.24. *Agathidium* (*Microceble*) *mussardi* Ang. & Dmz.

Agathidium (*Microceble*) *mussardi* Angelini & De Marzo, 1986: 449.

Material: Kerala, Thekkady, Peryar V. L. S., 2. IX. 1989, leg. Riedel, 6 ♂♂ and 4 ♀♀ (SMNS), 2 ♂♂ and 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types.
Distribution: India (Kerala and Tamil Nadu).

2.25. *Agathidium* (*Microceble*) *andrewesi* Port.

Agathidium (*Cyphoceble*) *andrewesi* Portevin, 1907: 254; 1926: 81; 1928: 32.
Agathidium (s. str.) *andrewesi*: Hatch, 1929: 66; Hlisnikovsky, 1964: 202.
Agathidium (*Microceble*) *andrewesi*: Angelini & De Marzo, 1986: 451.

Material: India, Tamil Nadu, Kodaikanal, Munnar, 28. VIII. 1989, leg. Riedel, 1 ♂ (SMNS).

Discussion: This new specimen agrees fully with the redescription of the types.
Distribution: India (Kerala, Tamil Nadu).

2.26. *Agathidium* (*Macroceble*) *malayanum* Ang. & Dmz.

Agathidium (s. str.) *malayanum* Angelini & De Marzo, 1986: 429.

Material: Malaysia, Malaya, Cameron Highland, Gunong Jasar, 4. IV. 1990, leg. Riedel, 1 ♂ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.
Distribution: Malaysia (Malaya).

2.27. *Agathidium* (*Macroceble*) *rougemonti* Ang.

Agathidium (s. str.) *rougemonti* Angelini, 1990: 250.

Material: Malaysia, Malaya, Cameron Highland, Gunong Jasar, 4. IV. 1990, leg. Riedel, 4 ♂♂ and 1 ♀ (SMNS), 1 ♂ and 1 ♀ (AC).

Discussion: These new specimens agree fully with the description of the types.
Distribution: Malaysia (Malaya).

2.28. *Agathidium* (*Macroceble*) *jaccoudi* Ang. & Dmz.

Agathidium (s. str.) *jaccoudi* Angelini & De Marzo, 1986: 429; Angelini, 1990: 242.

Material: Malaysia, Malaya, Fraser's Hill, 17. IV. 1989, leg. Riedel, 1 ♀ (SMNS).

Discussion: This new specimen agrees fully with the description of the types.
Distribution: Malaysia (Malaya).

3. References

Angelini, F. (1990): New species and records of *Agathidium* from Malaysia (Malaya) and the Philippines. – Coleopts Bull., **44**: 241–254; Dryden.

– (1992a): *Agathidium* raccolti in Thailandia dal Dr P. Schwendinger con descrizione di 4 nuove specie (Coleoptera, Leiodidae). – Revue suisse Zool., **99**: 201–209; Genf.

– (1992b): *Agathidium* di Sumatra e Birmania conservati nel Museo Civico di Storia naturale di Genova e descrizione di 9 nuove specie. – Annali Mus. civ. Stor. nat. Giacomo Doria, **89**: 199–218; Genova.

Angelini, F. & J. Cooter (1985): Studies on Anisotomini (Coleoptera, Leiodidae) of Sarawak. – Sarawak Mus. J., **34**: 125–143; Sarawak.

– & – (1986): New species and records of the genus *Agathidium* Panzer (Coleoptera, Leiodidae) from South-East Asia. – Entomologist's mon. Mag., **122**: 37–41; London.

Angelini, F. & L. De Marzo (1981): Reports of *Agathidium* from Himalaya: expeditions of Basel Natural History Museum and Prof. H. Franz (Coleoptera, Leiodidae). – Ent. basiliensia, **6**: 187–294; Basel.

– & – (1983): New species and records of *Agathidium* from Himalaya: expeditions of Basel Natural History Museum (Coleoptera, Leiodidae). – Ent. basiliensia, **8**: 153–164; Basel.

– & – (1985): Reports of *Agathidium* from Central Nepal and North India: expeditions 1979 and 1981 of Geneva Natural History Museum (Coleoptera, Leiodidae). – Revue suisse Zool., **92**: 33–76; Genf.

– & – (1986): *Agathidium* from India and Malaya: expedition of Geneva Natural History Museum (Coleoptera, Leiodidae). – Revue suisse Zool., **93**: 423–455; Genf.

– & – (1989): *Agathidium* from Thailand: expedition 1985 of the Geneva Natural History Museum (Coleoptera, Leiodidae, Anisotomini). – Revue suisse Zool., **96**: 459–478; Genf.

– & – (1993): *Agathidium* from Sumatra, Java and Borneo (Coleoptera, Leiodidae, Anisotomini). – Revue suisse Zool., **100**: 425–493; Genf.

Angelini, F. & S. L. Stephenson (1990): *Agathidium* collected in north western India with description of *Agathidium shimlense* n. sp. (Coleoptera Leiodidae). – Boll. Soc. ent. ital. **122**: 119–122; Genova.

Champion, G. C. (1924): Some indian Coleoptera. – Entomologist's mon. Mag., **60**: 161; London.

Hatch, M. H. (1929): Leiodidae, Clambidae. – Coleopterorum Catalogus, **105**: 1–100; Berlin.

Hlisnikovsky, J. (1964): Monographische Bearbeitung der Gattung *Agathidium* Panzer. – Acta ent. Mus. natn. Pragae (Suppl.), **5**: 1–255; Prag.

Portevin, G. (1907): Description de Silphides et Liodides nouveaux. – Bull. Soc. ent. Fr., **1907**: 251–255; Paris.

– (1926): Les Liodidae de l'Inde. – Encycl. ent., **1**: 75–83; Paris.

– (1928): Description d'un nouvel *Agathidium* des Iles de la Sonde. – Treubia, **10**: 31–32; Buitenzorg.

Author's address:

Fernando Angelini, S. S. 7 per Latiano, Km 0.500, I-72021 Francavilla Fontana (Brindisi), Italy.