

# REICHENBACHIA

STAATLICHES MUSEUM FÜR TIERKUNDE IN DRESDEN

Bd. 8

Ausgegeben: 21. Juni 1967

Nr. 20

## A Synopsis of the *Phaenocarpa* Först. Species of the Oriental Region (Hymenoptera, Braconidae, Alysiinae)

with 33 figures

J. P A P P  
Veszprém

### Introduction

No synopsis has been worked out so far on the Oriental *Phaenocarpa*-species. W. H. ASHMEAD was the first to introduce 3 new species of this genus from the Oriental Region (1905, 1906). Later P. CAMERON (1910), H. L. VIERECK (1913), A. B. GAHAN (1925) and C. WATANABE (1937) described new taxons from India, Indo-China, Philippines, and Japan, 5 species in all. I had the opportunity to examine the collection of several museums (London, Washington, Berlin, Budapest) concerning this genus and I increased the number of the known Oriental species to 16, of which 8 are new for science (*P. angusticellula* sp. n., *P. aurea* sp. n., *P. tjibodasi* sp. n., *P. ultima* sp. n., *P. urbana* sp. n., *P. vastifica* sp. n., *P. vegeta* sp. n., and *P. vicina* sp. n.) and 3 are new to the Oriental Region (*P. flavipes* HAL., *P. magna* ab. *cincta* PAPP, and *P. nitida* THOMS.). The present synopsis was elaborated by the research work carried out on 58 *Phaenocarpa* specimens. After having examined some types (*Stiralyisia testaceiventris* CAM., *Pentapleura?* *flavipes* CAM., and *P. bactrocerae* GAH.) I am inclined to change their taxonomical place (see respective remarks). On the other hand *Aclisis?* *ciliipennis* CAM. must be transferred into the subfamily *Exothecinae*, fam. *Braconidae* (see supplement). For the sake of completeness I registered in the identification key the species *P. leveri* NIXON (1939) from Fiji Islands (Notogaea).

The designations of the alar veins and cells are abbreviated according to FISCHER (1963, p. 204).

The list of the 16 Oriental *Phaenocarpa*-species is as follows:

*P. angusticellula* sp. n., ♀ (Singapore)  
*P. ashmeadi* nom. n., ♀ ♂ (Philippines)  
*P. aurea* sp. n., ♀ (Formosa)

*P. orientalis* (VIER.), ♀ (India,  
Philippines)  
*P. testaceiventris* (CAM.), ♀ (Viet-Nam)

<i>P. cameroni</i> nom. n., ♀ ♂ (Indo-China, Formosa)	<i>P. tjibodasi</i> sp. n., ♀ ♂ (Singapore, Philippines, Java)
<i>P. flavipes</i> (HAL.), ♀ ♂ (Europe, Nepal)	<i>P. ultima</i> sp. n., ♀ (Philippines)
<i>P. formosae</i> ASHM., ♂ (Formosa)	<i>P. urbana</i> sp. n., ♀ (Singapore)
<i>P. magna</i> ab. <i>ruficincta</i> PAPP, ♂ (Ethiopia, India)	<i>P. vastifica</i> sp. n., ♂ (Java)
<i>P. nitida</i> THOMS., ♀ ♂ (Sweden, Hungary, India)	<i>P. vegeta</i> sp. n., ♀ ♂ (Philippines)
	<i>P. vicina</i> sp. n., ♀ (Java)

### Acknowledgements

I am fully indebted to C. F. W. MUESEBECK (United States National Museum, Washington), G. E. J. NIXON (Commonwealth Institute of Entomology, London), and Dr. E. KÖNIGSMANN (Zoologisches Museum, Berlin) for their kindness to lend me the *Phaenocarpa* material.

### Key to species, ♀ ♀ and ♂ ♂

- 1 (12) Brachial cell (B) obsolete (subgenus *Asobara* FÖRST.)
- 2 (3) Cu<sub>2</sub> very long, proportion of its length to width as 5:1 (fig. 2). Proximal third of parapsides well-impressed, the rest almost indistinct. Antennae 33-jointed. Ratio of first two flagellar joints as 1:1.9 (fig. 1). Head transverse (2:0.95). Abdomen as long as thorax, ovipositor as long as abdomen. Body brownish-yellow. Last 9 joints of antennae whitish. Legs pale yellow. Length 2.5 mm. — Range: Malaysia (Singapore) ***P. angusticellula* sp. n., ♀**
- 3 (2) Cu<sub>2</sub> not conspicuously long, at most four times longer than broad
- 4 (7) Parapsides in the entire course evenly distinct
- 5 (6) Propodeum very coarsely reticulate. Mesonotum posteriorly with a rather deep, elongate, median fovea, from which a fine groove extends forward to the anterior part of the mesonotum. Tergite 1 longitudinally rugose. Body brownish-yellow, propodeum and abdomen dark brown. Legs pale yellow, coxae and trochanters white. Length 2.1 mm. — Range: Formosa (= Taiwan) ***P. formosae* ASHM., ♂**
- 6 (5) Propodeum smooth and shiny, only area superomedia distinct. Posterior fovea of mesonotum deep but without any groove anteriorly. Tergite 1 smooth and shiny, with two keels. Body brownish-yellow, abdomen from 2nd segment brown. Legs yellow. Length 2.7 mm. — Range: Formosa (= Taiwan) ***P. aurea* sp. n., ♀**
- 7 (4) Parapsides hardly distinct or obsolete
- 8 (9) Parapsides hardly distinct, the fore quarter section impressed and with very fine crenulae, rest only in traces. Mandibles (fig. 13) tiny, upper tooth rounded, Cu<sub>2</sub> of normal shape (fig. 11). Head cubic (fig. 12). Abdomen about the length of head and thorax. Body brownish-yellow, face, mesonotum, scutellum, and 1st tergite yellow, legs pale yellow. Length 2.8 mm. — Range: India, Philippines ***P. orientalis* (VIER.), ♀ ♂**

— Mesonotum brown, propodeum and scutellum rusty, otherwise similar to the nominate form. — Range: Philippines

***P. orientalis* var. *bactrocerae* (GAH.)**, ♀ ♂

9 (8) Parapsides entirely obsolete

10 (11) Head as wide as greatest width of thorax.  $Cu_2$  of normal shape, ratio of  $r_2:r_3$  as 1:2. Tergite 1 somewhat shorter than its posterior width. Funicle 1 to 2 as 5:8. Body brown. Mandibles, clypeus, cheeks, pronotum, propleura, and sometimes mesonotum light rufous. First 5–6 segments of antennae yellowish-testaceous, further ones tending to brown, apical 6–7 segments white. Legs pale honey-yellow, coxae and trochanters may be whitish. Length 1.8 mm. — Range: Fiji Islands

***P. leveri* NIXON**, ♀ ♂

11 (10) Head broader than thorax.  $Cu_2$  elongated,  $r_2$  concave, ratio of  $r_2:r_3$  as 1:2.1 (fig. 14). Tergite 1 elongated trapezoid, longer than its hind width (1:0.68). Funicle 1 to 2 as 5:7. Mandibles (fig. 16) similar to *P. orientalis*, however, its upper tooth rather rounded, middle tooth somewhat lesser. Body brown. Antennae brown, several of the last joints white. Head, pronotum, propleura, legs, and tergite 1 yellow. Coxae and trochanters white. Length 1.8 mm. — Range: Philippines

***P. ashmeadi* nom. n.**, ♀ ♂

12 (1) B distinct or hardly distinct

13 (14) B hardly distinct, anal vein only in traces, n postfurcal and very short. Head not conspicuously broader than thorax (2:1.53). Parapsides evenly distinct, shallow. Upper and lower tooth of mandibles rounded, middle one spiky (fig. 26). Propodeum with a short spine centrally.  $Cu_2$  short, 1.75-times longer than wide,  $r_3$  almost 3-times longer than  $r_2$ . Body dark reddish-brown, with a somewhat lighter dorsal streak. Legs brownish-yellow. Length 3.4 mm. — Range: Java

***P. vastifica* sp. n.**, ♂

14 (13) B well distinct

15 (20) Antennae very long, over 50 joints (subgenus *Kahlia* ASHM.)

16 (17) Tergite parallel-sided, 3-times longer than broad at apex. Antennae 67–74-jointed. Ovipositor as long as hind metatarsus. Body black. Mandibles yellowish-red, with black teeth. Legs reddish-yellow, hind leg with dark portions. Length 4.5–5.5 mm. — Range: Japan

***P. secunda* (ASHM.)**, ♀ ♂

17 (16) Tergite 1 gradually narrowed anteriorly, at least 2.3 times longer than broad at apex

18 (19) Parapsides evenly distinct (fig. 30). Face finely punctate. Propodeum carinate, with two central spines, unsculptured. N. rec. inserted in  $Cu_1$ ,  $Cu_2$  3-times longer than wide. 1st tergite smooth and shiny. Body rusty-brown, thorax rather dark. Legs brownish-yellow. Length 3.8–4 mm. — Range: Philippines

***P. vegeta* sp. n.**, ♀ ♂

19 (18) Parapsides indicated only at the apex. Face smooth and shiny. Anterior half of propodeum striate-rugose, posterior half smooth, shining, carinate. N. rec. inserted in  $Cu_2$ .  $Cu_2$  twice longer than wide. 1st tergite longitudinally striate-rugose. Body black. Mandibles, scape, pedicel, tegulae, and legs reddish-yellow. Palpi pale. Hind leg with fuscous sections. Length 5.5–6 mm. — Range: Japan

***P. jezoensis* WAT.**, ♀ ♂

20 (15) Antennae of normal length, at most with 50 joints (subgenus *Phaenocarpa* FÖRST.)

21 (24) Body at least 5 mm

22 (23) Head (fig. 19) conspicuously transverse (4.8:2), eyes somewhat protruding. Face besides eyes with a rugulose and shallow impression. Funicle 1 to 2 as 1:1.5. Vein  $r_2$  longer than  $cu_{qu_1}$  (1:0.75). Tergite 1 (fig. 17) with fine longitudinal striation. Abdomen as long as thorax. Body brownish-black. Mandibles, mesonotum, scutellum, tergites (except black 1st tergite) reddish-brown. Antennae brown, scape and pedicel brownish-yellow. Tegulae yellow. Sternites rufous. Legs yellow, palpi pale yellow. Length 5 mm. — Range: Viet-Nam **P. testaceiventris** (CAM.), ♀

23 (22) Head not so conspicuously transverse (4.5:2), eyes not protruding. Face besides eyes with a finely crenulate and narrow furrow. Funicle 1 to 2 as 1:2.1. Vein  $r_2$  hardly longer than  $cu_{qu_1}$  (1:0.85). Tergite 1 with rugulose striation. Abdomen as long as head and thorax together. Body pitch-brown. Scape, pedicel, mandibles, prothorax, tegulae, and tergite 1 rufous. Legs reddish-yellow, 2nd and fore half of 3rd segment testaceous. Length 6 mm. — Range: Ethiopia, India **P. magna** ab. **ruficincta** PAPP, ♂

24 (21) Body always shorter than 5 mm

25 (28) N. rec. inserted in  $Cu_2$  (fig. 22 and 25)

26 (27) Parapsides anteriorly deep, posteriorly indistinct. Upper tooth of mandible incised lobe-like (fig. 23).  $Cu_2$  3-times longer than wide, parallel-sided (fig. 22). Proportion of first 3 flagellar joints as 0.76:1:0.74. Ovipositor almost indistinct. Body yellowish-rusty, eyes greenish. Length 3.5 mm. — Range: Philippines **P. ultima** sp. n., ♀

27 (26) Entire parapsides very deep, medial lobe of mesonotum convex. Upper tooth rounded, without any incision (fig. 24).  $Cu_2$  twice longer than wide, distally narrowing (fig. 25). Proportion of first 3 flagellar joints as 1:1.4:1.3. Ovipositor as long as abdomen. Body rusty-brown, legs brownish. Length 3.5 mm. — Range: Singapore **P. urbana** sp. n., ♀

28 (25) N. rec. inserted in  $Cu_1$

29 (30) Parapsides anteriorly distinct, its posterior half gradually obsolescent. Tergite 1 elongated, 3-times longer than its apical width. Antennae almost twice longer than body, with 30–33 joints. Body brownish-black. Mandibles, prosternum, and tegulae rufous. Palpi pale yellow. Length 2.1–2.4 mm. — Range: Europe **P. flavipes** (HAL.), ♀ ♂

30 (29) Parapsides along the entire course evenly distinct

31 (34) Upper tooth of mandibles widely rounded, without any incision (fig. 31)

32 (33) Ratio of cephalic width and breadth as 2:1.3. Tergite 1 (fig. 32) elongate trapezoid, almost twice longer than width on hind margin (1:0.57), with a fine rugulosity. Proportion of first 3 flagellar joints as 1:1.2:0.87. Body blackish-brown, mesonotum and mesosternum rusty-brown. Legs brownish-yellow. Length 3.7 mm. — Range: Java **P. vicina** sp. n., ♀

33 (32) Ratio of cephalic width to breadth as 2:0.93. Tergite 1 trapezoid, one-third longer than its width on hind margin (1:0.71), with striato-rugosity. Proportion of first 3 flagellar joints as 1:1.4:1.2. Body rusty-brown, legs yellow. Length 4–4.2 mm. — Palaearctic Region, Japan ***P. pratellae* (CURT.)**, ♀ ♂

34 (31) Upper tooth of mandible distinctly incised

35 (36)  $Cu_2$  1.5-times longer than its width. Face smooth and shiny. Propodeum rugose, semicarinate. Body piceous black. Legs, mandibles, scape, and pedicel brownish-yellow. Length 3.6–3.8 mm. — Range: Sweden, Hungary, Mongolia, India ***P. nitida* THOMS.**, ♀ ♂

36 (35)  $Cu_2$  twice longer than its width

37 (38) Face punctate. Median lobe of mesonotum convex. Between upper and middle teeth of mandible a subtooth (fig. 20). Proportion of funicle 1 to 2 as 0.9:1. Tergite 1 (fig. 21) aciculate, smooth and shiny. Body blackish-brown, abdomen rusty. Legs yellowish-brown. Length 4 mm. — Range: Singapore, Philippines, Java ***P. tjibodasi* sp. n.**, ♀ ♂

38 (37) Face almost smooth and shiny. Median lobe of mesonotum normal. Between upper and middle teeth of mandible without any subtooth (fig. 10). Proportion of funicle 1 to 2 as 1:1.5 (fig. 9). Body pitch-brown. Mandibles, scape, pedicel, prosternum, tegulae rufous. Legs yellow. Length 3–4 mm. — Range: Indo-China, Formosa ***P. cameroni* nom. n.**, ♀ ♂

***Phaenocarpa (Asobara) angusticellula* sp. n., ♀ (figs. 1–3)**

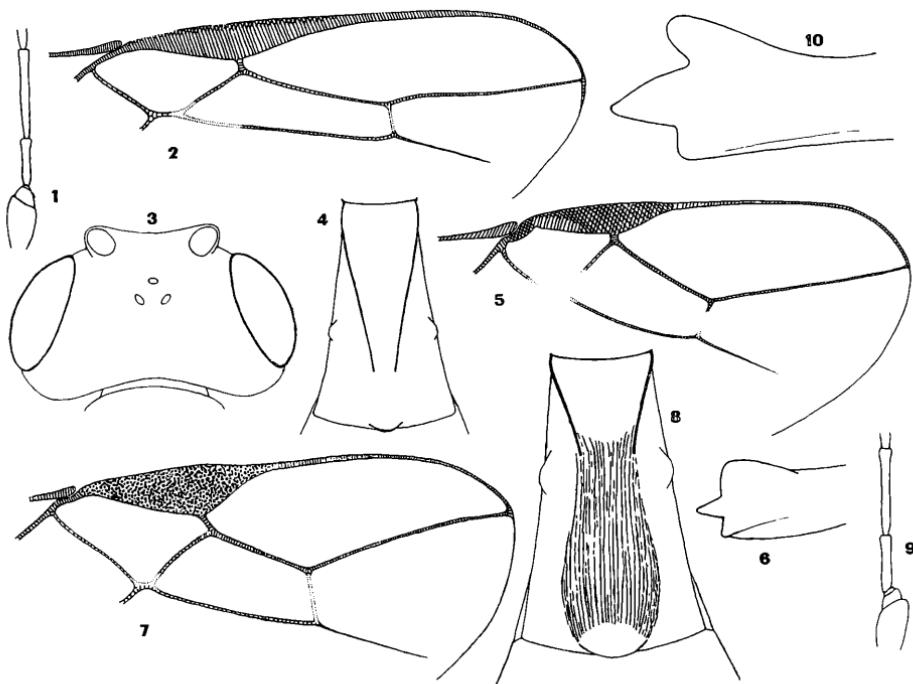
The new species stands nearest to *P. kovaci* PAPP (Ethiopian Region), but differs from it by the following characters: outline of head and thorax, shape and length of  $Cu_2$ , relative length of first two flagellar joints, length of ovipositor, and colour of body.

♀ Head (fig. 3) conspicuously transverse, ratio of its breadth to length as 2:0.95, glabrous and polished. Entire head together with eyes bare. Eyes large, almost round, its diameter twice longer than breadth of tempora, not protruding. Ocelli forming an equilateral triangle, laying in the central axis connecting eyes. Antennae twice longer than body, 33-jointed, pubescent. Ratio of first 2 flagellar joints as 1:1.9 (fig. 1), 5–19–21 joints gradually shortening, further joints of equal length, last one spiky.

Thorax of normal outline, ratio of cephalic and thoracic width as 1:0.55, smooth, shiny, and unhaired. Proximal third of parapside well-impressed, further section only in traces. Dimple deep. Prescutellar furrow not deep, with 3 crenulae. Scutellum rounded triangle. Propodeum without any sculpture, area superomedia visible. Upper corner of mesopleura impressed, without any sculpture, sternauli wanting.

Legs of normal form.

Wing (fig. 2) longer than body, 3.1 mm (1:0.86), somewhat narrow. Stigma elongately triangular,  $r_1$  issues almost from the middle of stigma,  $r_2$  straight,  $r_3$  arched and reaching apex of wing,  $r_2:r_3$  as 1:3.  $Cu_2$  conspicuously long (5:1), distally narrowing („angusticellula“),  $B$  wanting.



Figs. 1–3. *Phaenocarpa (Asobarra) angusticellula* sp. n. ♀ 1 = first four joints of right antenna, 2 = Part of right fore wing, 3 = Outline of head. — Figs 4–6. *P. (Asobarra) aurea* sp. n. ♀ 4 = 1st tergite, 5 = Part of right fore wing, 6 = Left mandible. — Figs. 7–10. *P. (s. str.) cameroni* nom. n. ♂ 7 = Part of right fore wing, 8 = 1st tergite, 9 = First four joints of antenna, 10 = Left mandible.

**A b d o m e n** elongate-oval, as long as thorax. 1st tergite trapezoid, its length and posterior width as 1.35:1, with two posteriorly converging keels which extend over almost the entire tergite. All segments smooth and polished, without any hairs. Ovipositor as long as abdomen.

Head, thorax, and abdomen brownish-yellow. Antennae pale brownish-yellow, last 9 joints whitish. Palpi, legs, and ovipositor pale yellow. Wings hyaline, stigma and veins pale yellow.

Length 2.5 mm, alar expanse 7.8 mm.

♂ and host unknown.

**Locality** Singapore (Malay Peninsula), 1902, 1 ♀ (holotype), leg. BIRÓ.

**Holotype** in the Hungarian Natural History Museum, Budapest. Hym. Typ. Nr. 308.

**Remark.** — The holotype is not in a good condition. Its scutellar region broken, right antenna only with 21 joints, right fore wing wrinkled, tarsi hardly visible (as the result of bad preparation).

***Phaenocarpa (Asobara) ashmeadi* nom. n., ♂ new (figs. 14-16)**

*Aclisis pleuralis* ASHMEAD, 1905, Canad. Entom., 37, p. 6, ♀

Mr. C. F. W. MUESEBECK (Washington) was kind enough to loan to me a male specimen from the U. S. National Museum, Washington, which was identified by him as *P. pleuralis* (ASHM.). ASHMEAD ranged this species incorrectly into genus *Aclisis* (presently a subgenus of *Phaenocarpa*) because  $r_1$  and  $r_2$  meet in an arch, and *B* is wanting. — From the Neotropic Region (St. Vincent Islands, West-Indies) ASHMEAD described another taxon naming also as *P. pleuralis* (J. Linn. Soc. London, Zool., 1894, 25, p. 137, ♀). The Philippine species is the junior name, therefore this homonym must be altered as *P. ashmeadi* nom. n.

Furtherly I give some additional characters to complete the original description:

♂ Head somewhat cubic, ratio of its width to length as 2:1.6 (fig. 15). Mandible (fig. 16) reminds one of *P. orientalis* (VIER.), upper tooth more, middle tooth somewhat lesser rounded. Parapsides indistinct, its course is indicated by a row of hairs. Propodeum with area superomedia, otherwise smooth. Wings (fig. 14) shorter than body, 2 mm. Stigma triangular,  $r_1$  issues from its center  $r_2:r_3$  as 1:2,  $Cu_2$  elongate. *B* wanting. Abdomen longer than head and thorax together (1:0.85). 1st tergite elongate trapezoid (1:0.68), with two distally converging keels. Colour as in original description. Length 2.1 mm.

Locality Manila, Philippines, coll. R. Brown, 1 ♂ (in the U. S. National Museum, Washington).

***Phaenocarpa (Asobara) aurea* sp. n., ♀ (figs. 4-6)**

The new species stands nearest to *P. formosae* ASH., but differs from it by the following marks: mesonotum only with one posterior dimple, propodeum and first tergite smooth and polished, length (2.8 mm) and colour of body.

♀ Head somewhat cubic, ratio of its breadth and length as 2:1.4, smooth and polished. Face with long but scattered hairs, otherwise with short hairs. Eyes bare, not protruding from the outline of head, nearly round. Ocelli forming an equilateral triangle, lying in the central axis connecting eyes. Tempora narrow, ratio of its breadth to diameter of eye as 1:5. Mandible (fig. 6) not robust, upper tooth rounded, middle one little but spiky, lower one with a keel. Antennae about twice longer than body, 27-29-jointed, hairy. Ratio of funicle 1 to 2 as 1:1.4, further joints gradually shortening but the last ones many times longer than broad.

Thorax of normal form, proportion of cephalic to thoracic width as 1:0.75, smooth, shiny, and with scattered hairs. Parapsides distinct, in its entire course of equal depth, posteriorly gradually converging and meeting in a dimple. Prescutellar furrow not deep, of normal width, with 3 crenulae. Scutellum rounded triangle. Propodeum smooth and shiny, area superomedia distinct. Upper part of mesopleura with a linear groove, sternauli deep and extends on the fore half of mesopleura, uncrenulated.

Legs of normal form. Proportion of hind tibia and tarsus as 1:0.85.

Wing (fig. 5) somewhat longer than body, 2.9 mm (1:0.94). Stigma elongate triangle,

$r_1$  arises somewhat distally from stigma,  $r_2$  and  $r_3$  straight, their proportion as 1:1.8,  $r_3$  reaches apex of wing.  $Cu_2$  somewhat broad. B wanting.

A b d o m e n bare, elongate oval, longer (and narrower) than thorax (1:0.84). 1st tergite (fig. 4) elongate trapezoid, its length to posterior width as 1.45:1. Two keels converge posteriorly, and extend over almost three quarters of the tergite. Further tergites and all sternites smooth and polished. Ovipositor as long as abdomen.

Head, thorax, and 1st tergite pale brownish-yellow („aurea“), rest of abdomen (dark) brown. First four antennal joints pale brownish-yellow, 5-7(-8) joints darkening, 8(9)-18(20) joints brown, last 9 joints whitish. Palpi pale yellow. Legs yellow. Wings hyaline. Stigma and veins yellow.

Length 2.7 mm, alar expanse 6.3 mm.

♂ and host unknown.

Locality Fuhusho, Formosa (= Taiwan), Sept. 1909, 2 ♀ (1 ♀ holotype and 1 ♀ paratype), leg. SAUTER. Holotype and paratype in the Hungarian Natural History Museum, Budapest. Hym. Typ. Nr. 309-310.

Remark. — Left funicle of paratype missing.

**Phaenocarpa (s. str.) cameroni nom. n., ♀ new (figs. 7-10)**

*Pentapleura? flavipes* CAMERON, 1910, Wiener Entom. Ztg., 29, p. 8-9, ♂

A. H. HALIDAY described his species „*flavipes*“ in 1838. (PAPP 1967, in print). Though P. CAMERON ranged his species *flavipes* in *Pentapleura?*, on the base of my type-examination this species must be transferred into genus *Phaenocarpa*. In that new taxonomical range the name *flavipes* CAM. is junior homonymous one, therefore must be altered as *P. cameroni* nom. n.

The following marks complete the original description:

♀ ♂ Head conspicuously transverse, its breadth to length as 2:1. Eyes somewhat protruding from the outline of head. Mandible (fig. 10) robust, upper and lower teeth rounded, middle tooth spiky, between middle and upper teeth an incision. Antennae longer (but not twice longer) than body, with 28-34 (and not 56) joints. Ratio of funicle 1 to 2 as 1:1.5 (fig. 9). Face with very fine and scattered punctures, otherwise head smooth and polished. Parapsides deep and meeting posteriorly in deep and linear groove. Wing (fig. 9) as long as body. Proportion of  $r_2$  to  $r_3$  as 1:2,  $r_3$  somewhat curved. Abdomen as long as thorax. Tergite 1 (fig. 8) trapezoid (2:1.25), longitudinally striate. Ovipositor about the length of abdomen and thorax together. Body pitch brown. Edge of mesonotum and course of parapsides rusty. Scape, pedicel, mandibles, tegulae, prosternum rufous, legs brownish-yellow, palpi pale yellow. Length 3-4 mm.

Localities „Tonking“ = Bakbo, North Viet-Nam, 1 ♀ (holotype), leg. FRUHS-TORFER. — „Pahang, F. M. S., Cameron Highlands, No. 4 Camp 4800 ft.“, Malaysia, 8-20 June 1923, 7 ♀, coll. H. M. PENDLEBURY (in British Museum, Nat. Hist., London). — „Pahang, F. M. S., Lubok Tamang, highs. 3500 ft.“, Malaysia, 8 June 1923, 1 ♀, coll. PENDLEBURY (in British Museum, Nat. Hist., London). — „Mt. Hoozan, Formosa“ (= Taiwan), Dec. 1909, 1 ♂, March 1910, 2 ♂ coll. SAUTER (in

Hungarian Natural History Museum, Budapest). — „Taihorin, Formosa (= Taiwan), Dec. 1910, 1 ♂, coll. SAUTER (in Zoologisches Museum, Berlin).

Lectotype in Zoologisches Museum, Berlin.

Remark. — The lectotype is in bad condition. Antennae broken, only with fore right wing, entire body dirty.

***Phaenocarpa* (s. str.) *flavipes* HAL.**

The occurrence of that species in the Oriental Region (Nepal) is very interesting. Until now it has only been reported from Europe (PAPP 1967, in print). The new locality in Nepal extends widely its known distribution in Eurasia, including the Palaearctic and Oriental Regions.

There are only minute colour deviations between European and Nepalian specimens (body pitch brown, legs pale yellow).

Distribution Europe, Nepal. New locality: „Tapplejung Distr., Sangu, c 6200', Mixed vegetation by stream in gully, IX—X. 1961., Brit. Mus. Eest Nepal Exp. 1961—1962., R. L. COE Coll., B. M. 1962—177“, 2 ♀ and 1 ♂ (in British Museum, Nat. Hist., London).

***Phaenocarpa* (Asobara) *formosae* ASHM.**

*Phaenocarpa formosae* ASHMEAD, 1906, Proc. U. S. Nat. Mus., Washington, 30, p. 186—187, ♂.

*Phaenocarpa formosae*: 1937 WATANABE, J. Fac. Agric. Hokkaido Imp. Univ., 42, p. 164.

Since I have not seen the type or any other specimens of that species, I can only give a few more characters what were kindly sent to me by C. F. W. MUESEBECK in 1966 in his letter which I hope shall complete the original description:

„The parapsidal furrow (notauli) are distinctly impressed and finely foveolate on the anterior five-sevenths of the mesoscutum; there is also a rather deep, elongate, median fovea posteriorly on the mesoscutum, from which there is a fine groove extending forward to the anterior part of the scutum. The propodeum is very coarsely rugose reticulate, the cells being very large; and the first tergite is longitudinally rugose, with convergent basal keels very prominent.“

The species was described from Formosa (= Taiwan).

***Phaenocarpa* (s. str.) *magna* ab. *ruficincta* PAPP**

I described the species and its aberration from Ethiopia (PAPP 1966, p. 140—142). The single male specimen from India is similar to the Ethiopian ones, however, besides 1st sternite and 2nd segment of abdomen the fore half of 3rd segment is also testaceous.

Distribution Ethiopia, India. — New locality: „Mercara, Coorg., S. India, 4. Oct. 1918, N. B. KINNEAR“, 1 ♂ (in British Museum, Nat. Hist., London).

**Phaenocarpa (s. str.) nitida THOMS.**

Known from Europe (Sweden, Hungary) and from Mongolia (PAPP 1967, p. 211). The new locality in India extends its distribution into the Original Region.

Deviations from the European and Mongolian specimens: body (together with entire abdomen) black, scape and pedicel, and legs rusty brown.

New locality: New Delhi, India, on alfalfa, 1956, 2 ♂, leg. ANGALET (in British Museum, Nat. Hist., London).

**Phaenocarpa (Asobara) orientalis (VIER.) (figs. 11—13)**

*Asobara orientalis* VIERECK, 1913, Proc. U. S. Nat. Mus. 44, p. 639, ♀

I have seen 1 ♀ paratype in a loan material from C. F. W. MUESEBECK. The additional marks to the original description are based on that specimen:

Head (fig. 12) somewhat cubic (2:1.45), smooth and polished. Mandible (fig. 13) not robust, upper tooth rounded, middle tooth tiny and spiky. Parapside hardly distinct, only the fore quarter section impressed and with very fine crenulae. Propodeum smooth and shiny, only area superomedia visible. Wing (fig. 11) about the length of the body. Stigma triangular,  $r_1$  very short and arises from its center,  $r_3$  almost twice longer than  $r_2$ ,  $Cu_2$  of normal shape,  $B$  wanting. Abdomen about the length of head and thorax together, elongated oval. 1st tergite similar to *P. pleuralis*. Ovipositor short, as long as 1st tergite. Colour as in original description. Length 2.8 mm (and not 1.5 mm).

Distribution India, Philippines. — New localities: India, coll. GEORGE COMPÈRE, 1 ♀ (paratype). — Lipa, Luzon, Philippines, 4. Jan. 1954, 1 ♀ & 1 ♂, ex Fruit fly, leg. C. MACABASCO. — Los Baños, Luzon, Philippines, 1 ♀, leg. BAKER. All specimens in U. S. National Museum, Washington.

**Phaenocarpa (Asobara) orientalis var. *bactrocerae* (GAH.) ♂ nov.**

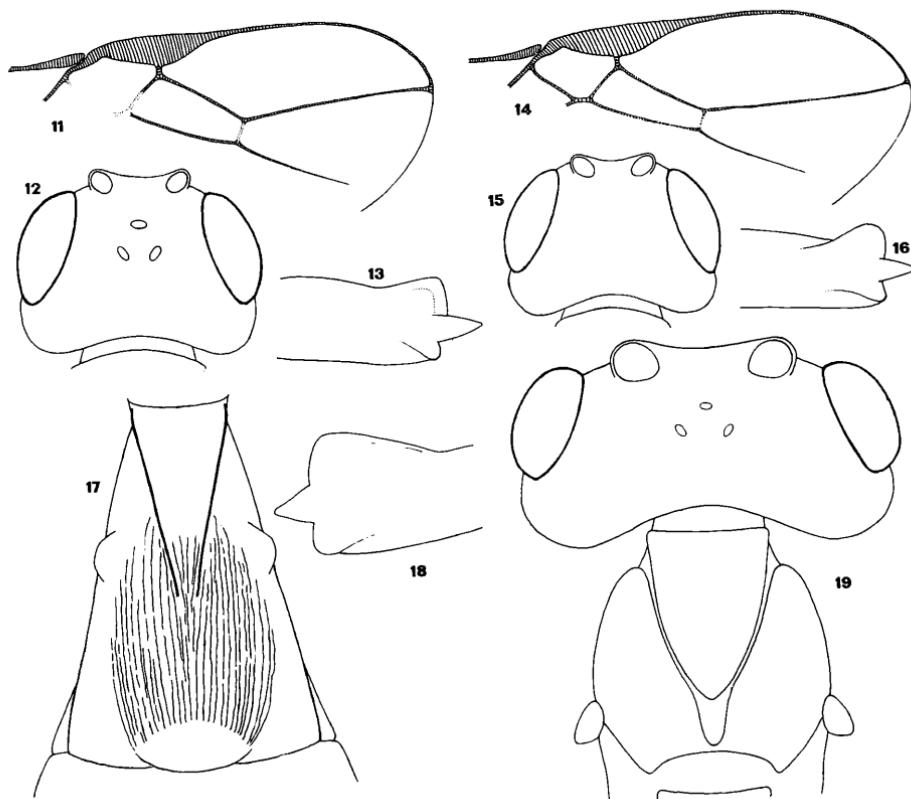
*Phaenocarpa (Asobara) bactrocerae* GAHAN, 1925, Philippine J. Sci. 27, p. 88—89, ♀

In examining three specimens of this species (one of it named by C. F. W. MUESEBECK as „*Asobara bactrocerae* GAHAN“) I might establish that the form *bactrocerae* GAHAN differs in some colour marks from *orientalis* VIER. as follows. Mesonotum and abdomen (except tergite 1) brown, propodeum and scutellum rusty. Therefore I regard *bactrocerae* GAHAN as a variety of *P. orientalis* (VIER.).

Localities Lipa, Luzon, Philippines, 4. Jan. 1954, 1 ♀, ex Fruit fly, leg. C. MACABASCO. — Los Baños, Luzon, Philippines, 1 ♀, leg. BAKER. — Mt. Makiling, Luzon, Philippines, 4 ♀, leg. BAKER. All specimens in U. S. National Museum, Washington. — Damalon, Luzon, Philippines, 1 ♀, leg. STAUDINGER (in Hungarian Natural History Museum, Budapest).

**Phaenocarpa (s. str.) *testaceiventris* (CAM.) (figs. 17—19)**

*Stiralsysia testaceiventris* CAMERON, 1910, Wiener Entom. Ztg., 29, p. 7—8, ♀, new synonym of the genus.



Figs. 11—13. *Phaenocarpa (Asobara) orientalis* (VIER.) ♀♂ 11 = Part of right fore wing, 12 = Outline of head, 13 = Right mandible. — Figs. 14—16. *P. (Asobara) ashmeadi* nom. n. ♂ 14 = Part of right fore wing, 15 = Outline of head, 16 = Right mandible. — Figs. 17—19. *P. (s. str.) testaceiventris* (CAM.) ♀ 17 = 1st tergite, 18 = Left mandible, 19 = Outline of head and thorax.

As the above taxonomical consideration shows that originally this species has been described by P. CAMERON in his new genus *Stiralygia*. By the kindness of Dr. E. KÖNIGSMANN I examined the types (2 females). On the base of it the genus *Stiralygia* is synonymous with *Phaenocarpa* FÖRST.

P. CAMERON described this species on the base of two females. One of it is the lectotype („Tonking“ = Bakbo, North Viet-Nam, leg. FRUHSTOFER).

The lectotype is not in good condition. Entire right antennae, fore right wing, and hind left leg (from trochanter) are missing. Left antenna only of 17 joints. The other female very damaged, practically unidentifiable. Its data agree with the lectotype.

New locality: „Malaya, Frasers Hill, Pahang, Oct. 1948, 1 ♂, leg. N. L. H. KRAUSS“ (in U. S. National Museum, Washington).

**Phaenocarpa (s. str.) tjbodasi sp. n., ♀ ♂ (figs. 20–21)**

The new species stands nearest to *P. flavipes* HAL. and *P. cameroni* nom. n., but from both species it differs by the following marks: outline of head and thorax, deep parapsides, venation of wing, denture of mandible (fig. 20), form and sculpture of 1st tergite, and colour of body.

**♀ Head** transverse, almost twice wider than long (2:1.08), smooth and shiny. Face, clypeus, and mandible hairy, otherwise head together with eyes bare. Face punctated. Mandible (fig. 20) with three spiky teeth, between upper and middle tooth a little subtooth. Maxillary palpi about the length of the height of head, and shorter than thorax. Eye not protruding from the outline of head, nearly round. Tempora narrow. Ocelli on an isosceles triangle. Antennae incomplete, however, longer than body. Ratio of first 3 funicle joints as 0.9:1:0.7, first joint only somewhat shorter than 2nd one.

**Thorax** of normal form, somewhat narrower than width of head (2:1.7), smooth and shiny. Lower part of mesopleura, metapleura, and mesosternum hairy, otherwise thorax bare. Shoulder and hind margin of pronotum with a fine crenulation. Parapsides very deep, with a row of long hairs. Middle lobe of mesonotum convex. Pre-scutellar furrow of normal width and depth, with three crenulae, laterally with a spinule (as on *P. vegeta* sp. n.). Propodeum carinate, smooth, and shiny. Sternauli extend normally, with fine crenulae. Hind margin of mesopleura finely crenulated, lower part of mesopleura punctate (this puncture finer than on face).

**Wing** as long as body. Stigma elongate,  $r_1$  issues from hind third. Ratio of  $r_2$  to  $r_3$  as 1:2.08,  $r_2$  straight,  $r_3$  somewhat curved and reaches apex of wing.  $Cu_2$  twice longer than its width (1:0.47), distally somewhat narrowing. Nervulus postfurcal.

**Legs** slender without any specific marks.

**Abdomen** as long as head and thorax together, elongate. Ratio of thoracic (between tegulae) to greatest abdominal width as 1:0.78. 1st tergite (fig. 21) aciculate, 2.4-times longer than its posterior width, smooth, and shiny. Spiracles before the middle, tiny. Further tergites and all sternites smooth and shiny, with scattered hairs. Ovipositor somewhat shorter than abdomen (1:1.3).

Head, thorax, and tergite 1 blackish-brown, rest of abdomen fumous rusty-brown. Mandibles rusty-brown. Scape and pedicel yellowish-brown, flagellar joints 1–4–5 rusty-brown, 5–6–10–13 darkening, further joints black. Antennae without any white ring. Palpi pale yellow. Middle of pronotum, lateral margin of mesoscutum, scutellum, and metanotum dark rusty-brown. Tegulae brownish-yellow. Legs yellowish-brown, apex of hind femur, tibia, and tarsus fumous. Wings hyaline. Stigma and veins yellowish-brown.

Length 4 mm, alar expanse 8.6 mm.

**♂** Differences from female: punctuation of face and mesopleura fine, head and thorax rather dark rusty brown, 1st tergite with fine striation. Antennae incomplete. Length 3.2–3.5 mm.

Host unknown.

**Localities** Singapore, 1 ♀ (holotype), leg. BAKER. — Mt. Makiling, Luzon, Philippines, 1 ♂ (paratype), leg. BAKER. — Tjibodas, Mt. Gede, Java (Indonesia), altitude 4500–6000 ft., Sept. 9–10, 1909, 8 ♂ (paratypes).

Holotype and paratypes in the U. S. National Museum, Washington (USNM Typ. Nr. 69 258), 1 paratype in the Hungarian Natural History Museum, Budapest (Hym. Typ. Nr. 311).

***Phaenocarpa (s. str.) ultima* sp. n., ♀ (figs. 22–23)**

The new species stands nearest to *P. postfurcata* PAPP (Ethiopian Region), but differs from it by the following marks: denture of mandible (fig. 23), venation of wing (fig. 22), outline of 1st tergite, and colour of body.

♀ Head transverse, ratio of width to length as 2:1.4. Face with very fine punctuation, face, clypeus, and mandible haired, otherwise head smooth, shiny, and bare. Eyes nearly round, bare, not protruding from the outline of head. Ocelli in an isosceles triangle. Tempora as wide as half diameter of eye. Mandible strong (fig. 23), upper tooth rounded and lobe-like, middle tooth somewhat spiky, lower tooth rounded. Maxillary palpi longer than height of head but shorter than thorax. Antennae incomplete, right antenna of 18-joints, left antenna missing. Proportion of first 3 flagellar joints as 0.76:1:0.74, further ones gradually shortening.

Thorax narrower than head (2:1.4), smooth and shiny. Upper and lower part of mesopleura, metapleura, propodeum, pro- and mesosternum hairy, otherwise thorax bare. Anterior half of parapsides deep, with a very fine crenulation, posterior half of it indistinct. Entire run of parapsides with a row of hairs. Dimple deep and groove-like, continuing in a furrow-like line, which is not so deep and broad as dimple. Prescutellar furrow somewhat shallow, crenulate. Propodeum carinate and rugulose. Sternauli conspicuously broad, finely crenulate, and extends on the upper corner of mesopleura.

Wing as long as body. Stigma elongate triangular,  $r_1$  issues from hind third,  $r_2$  longer than  $r_3$  (1:0.83),  $r_2$  almost straight,  $r_3$  weakly bicurved, reaches apex of wing.  $Cu_2$  long (1:0.38), parallel-sided. N. rec. postfurcal. Nervulus almost interstitial.

Legs somewhat slender without any specific marks.

Abdomen shorter than body (0.72:1), its outline broad-oval, its greatest width (on the hind margin of the 2nd segment) equal with thoracic breath (between tegulae). 1st tergite long-trapezoid, its length somewhat longer than its hind width (1:0.71), convex, with fine longitudinal striation, 2nd tergite almost as long as 1st one, 1st hind margin arched (and not straight), together with further tergites and all sternites smooth and shiny, with scattered hairs. Ovipositor very short, hardly overlapping apex of abdomen.

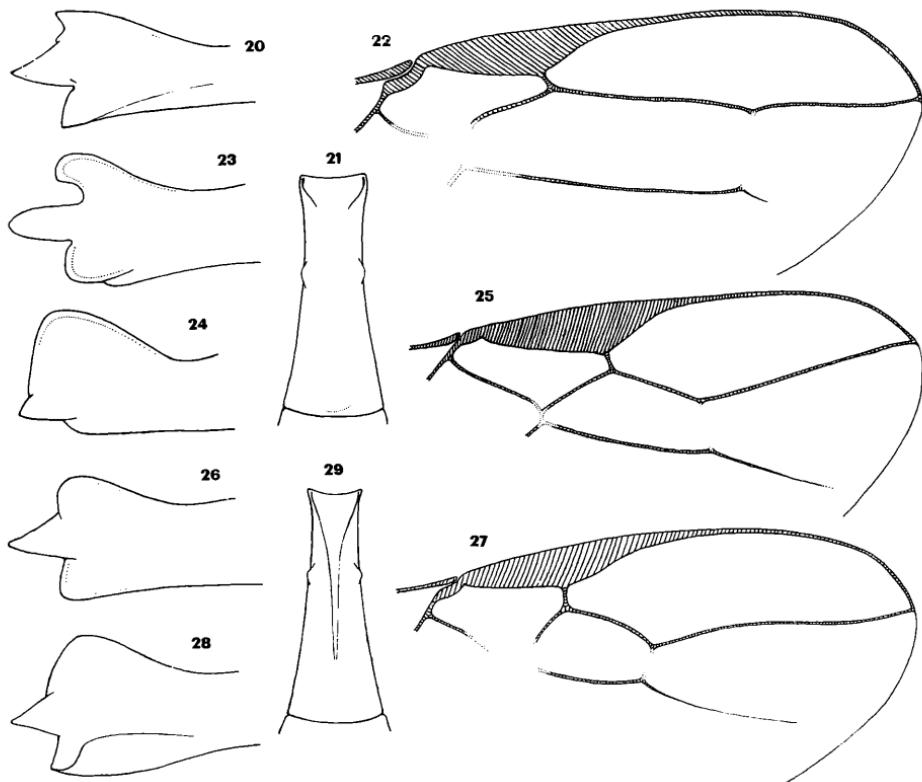
Body yellowish-rusty. Scape and pedicel yellowish-rusty, further joints of antennae gradually darkening. Middle tooth of mandible dark. Palpi pale yellow. Legs rusty-yellow. Wings hyaline, veins and stigma brownish-yellow. Eyes greenish.

Length 3.5 mm, alar expanse 7.7 mm.

♀ and host unknown.

Locality Los Baños, Philippines, 1 ♀ (holotype), leg. BAKER.

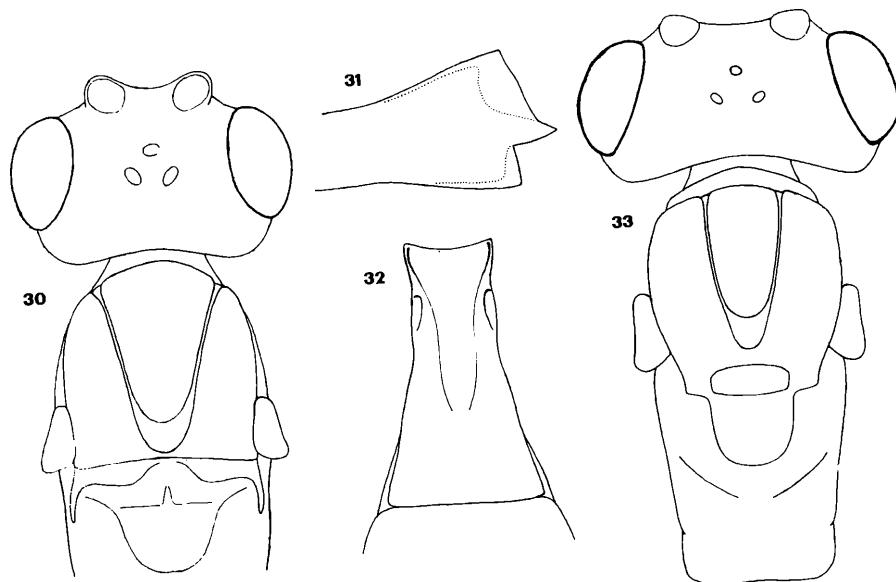
Holotype in the U. S. National Museum, Washington (USNM Typ. nr. 69 259).



**Phaenocarpa (s. str.) urbana sp. n., ♀ (figs. 24–25)**

The new species stands nearest to *P. kittenbergeri* PAPP ♀, but differs from it by the following marks; form and denture of mandible (fig. 24), conspicuously deep parapsides, venation of wing, form and sculpture of 1st tergite, and colour of body. ♀ Head transverse, proportion of its breadth and length as 2:1.2. Face with fine punctuation, together with clypeus and mandible hairy, otherwise head bare. Eyes of normal outline, nearly round. Ocelli in an isosceles triangle. Tempora relatively narrow, as wide as half diameter of eye. Mandible's specific marks (fig. 24): upper tooth large but rounded, middle tooth tiny and spiky, lower tooth almost indistinct. Antennae incomplete, however, longer than body. Antennae incomplete, right one with 30, left one with 15 joints. Ratio of first flagellar joints as 1:1.4:1.3. 4–12–15 flagellar joints gradually shortening, further ones of equal length, however, 2.5-times longer than broad. All flagellar joints pubescence. Maxillary palpi as long as height of head.

Thorax narrower than head, ratio of cephalic to thoracic width as 2:1.4. Thorax smooth and shiny. Parapsides very deep, central lobe of mesonotum convex, with a row of hairs. Prescutellar furrow somewhat shallow, with three crenulae. Propo-



## Explications (Figs. 20–33)

Figs. 20–21. *Phaenocarpa* (s. str.) *tjibodasi* sp. n. ♀♂ 20 = Left mandible, 21 = 1st tergite. — Figs. 22–23. *P. (s. str.) ultima* sp. n. ♀ 22 = Part of right fore wing, 23 = Left mandible. — Figs. 24–25. *P. urbana* sp. n. ♀: 24 = Left mandible, 25 = Part of right fore wing. — Figs. 26–27. *P. (s. str.) vastifica* sp. n. ♂ 26 = Left mandible, 27 = Part of right fore wing. — Figs. 28–30. *P. vegeta* sp. n. ♀♂: 28 = Left mandible, 29 = 1st tergite, 30 = Outline of head and thorax. — Figs. 31–33. *P. (s. str.) vicina* sp. n. ♀ 31 = Right mandible, 32 = 1st tergite, 33 = Outline of head and thorax.

deum carinated, rugulosed. Upper part of mesopleura with some rugulosity and with a furrow. Sternauli broad, crenulated. Upper and lower part of mesopleura and metanotum hairy

Wing (fig. 25) as long as body. Stigma triangular,  $r_1$  issues from the hind third. Ratio of  $r_2$  and  $r_3$  as 1:2.1,  $r_2$  and  $r_3$  straight,  $r_3$  reaches apex of wing.  $Cu_2$  twice longer than broad (1:0.48), distally narrowing. N. rec. postfurcal. Nervulus almost interstitial.

Legs of normal form.

Abdomen as long as head and thorax together its outline normally, hardly narrower than thorax (1:1.15). Tergite 1 trapezoid, proportion of its length to posterior width as 1:0.92, with a fine longitudinal striation and two keels. Further tergites and all sternites smooth and shiny, with scattered hairs. Ovipositor as long as abdomen.

Body and antennae rusty-brown. Mandibles yellowish-rusty. Palpi pale yellow. Legs brownish-yellow, hind tibia and tarsus somewhat darker. Wings hyaline. Veins and stigma yellowish-brown.

Length 3.5 mm, alar expanse 7.5 mm.

♂ and host unknown.

Locality Singapore, 1 ♀ (holotype), coll. BAKER.

Holotype in the U. S. National Museum, Washington (USNM Typ. nr. 69 260).

**Phaenocarpa (s. str.) vastifica sp. n., ♂ (figs. 26–27)**

The new species stands nearest to *P. tjibodasi* sp. n., but differs from it by the following marks: outline of head and thorax, form and denture of mandible (fig. 26), venation of wing (fig. 27), and colour of body.

♂ Head hardly twice broader than its length (2:1.1). Face minutely and dispersely punctated, vertex, tempora, and occiput smooth and shiny. Face, clypeus, and mandible hairy, otherwise head bare. Maxillary palpi almost as long as thorax. Mandible (fig. 26) normal, upper and lower tooth rounded, middle tooth spiky. Eyes somewhat protruding from the outline of head, bare, nearly round. Ocelli in an equilateral triangle, base of triangle twice longer than its sides. Tempora as wide as half diameter of eye. Antennae longer than body, pubescence, incomplete. Both right and left antenna of 16-joints. Ratio of first 3 flagellar joints as 1:2:1.6. Further joints gradually shortening.

Thorax somewhat stout, hairs scattered, ratio of cephalic and thoracic width as 2:1.53. Parapsides evenly distinct, shallower than dimple. Between parapsides on the anterior half of middle lobe along the longitudinal line a furrow which is of equal depth with parapsides. Prescutellar furrow with 3 crenulae. Propodeum carinated, with minute rugulosity, centrally with a short spine. Sternauli normal, crenulate.

Wing (fig. 27) longer than body (1.1:1). Stigma somewhat elongated triangle,  $r_1$  issues from hind third. Proportion of  $r_2$  and  $r_3$  as 1:2.6,  $r_2$  somewhat convex,  $r_3$  bicurved.  $Cu_2$  short, 1.75-times longer than wide. N. rec. antefurcal. Nervulus together with B almost indistinct.

Legs slender without any specific marks.

Abdomen as long as head and thorax together. Ratio of thoracic and abdominal (on hind margin of 2nd segment) width as 1:0.77. Abdomen elongated with almost parallel sides. 1st tergite almost aciculate, 1.8-times longer than width of its hind margin. Spiracles before the middle, scutum convex, striate-rugulose. Further tergites and sternites smooth and shiny, with scattered hairs.

Body dark rusty brown. Face, pronotum, central-longitudinal streak of mesonotum, and scutellum reddish-brown. Antennae blackish-brown. Scape and pedicel reddish-brown, further 5–6 joints darkening. Palpi pale. Legs brownish-yellow, claws with its joints dark. Wings somewhat fumous. Stigma brownish-yellow, veins yellowish-brown.

Length 3.4 mm, alar expanse 7.8 mm.

♀ and host unknown.

Locality Tjibodas, Mt. Gede, Java (Indonesia), 1 ♂ (holotype), coll. BRYANT & PALMER.

Holotype in the U. S. National Museum, Washington (USNM Typ. nr. 69 261).

***Phaenocarpa* (s. str.) *vegeta* sp. n., ♀ ♂ (figs. 28–30)**

The new species stands nearest to *P. madagascariensis* SZÉPL. (Ethiopian Region), *P. jezoensis* WAT., and *P. secunda* (ASHM.). From the first species it differs by the venation of wing, outline and sculpture of 1st tergite, and colour of body. From the last two species it differs by the outline of head and thorax, the deep parapsides, outline and sculpture of tergite 1, and colour of body.

♀ Head (fig. 30) cubic, scarcely broader than thorax, ratio of its breadth to length as 2:1.35. Face finely punctate, otherwise head smooth and polished. Eyes somewhat protruding. Ocelli in an isosceles triangle. Upper tooth of mandible (fig. 28) blunt, middle tooth spiky. Antennae at least twice longer than body. Antennae of all type-specimens broken. The antennal joints of holotype (♀) on left one as 51, on right one as 45. Ratio of funicle 1 to 2 as 1:1.12, 5–20–22 joints gradually shortening, further joints of equal length but twice longer than wide. Face, clypeus, and mandibles haired, otherwise head with scattered hairs, eyes bare. Antennae pubescent. Maxillary palpi as long as thorax.

Thorax (fig. 30) of normal form, scarcely narrower than width of head. Proportion of length, width, and height as 3:1.5:2.15. Entire thorax smooth, shiny, with dispersed hairs. Hind margin of lateral side of pronotum with punctures. Parapsides equally well distinct (but not conspicuously deep) in the entire course, with a row of hairs. Dimple deep. Hind margin of mesonotum edge-like. Prescutellar furrow of normal depth, laterally with spinules. Propodeum carinate, however, without any sculpture, two spines emerging from the lateral angle of area superomedia. Sternauli short, crenulate. Furrow along hind margin extends over half the breadth of mesopleura, crenulate.

Wing somewhat longer than body (4.1 mm). Stigma elongate,  $r_1$  issues from the hind third. Ratio of  $r_2$  to  $r_3$  as 1:1.45,  $r_2$  straight,  $r_3$  somewhat curved, and reaching apex of wing.  $Cu_2$  long (3:1), of equal width. Nervulus conspicuously postfurcal.

Abdomen somewhat shorter than head and thorax together (1:1.15). 1st tergite (fig. 29) 2.3-times longer than its posterior width, smooth and shiny, with two fine keels. Spiracles tiny. Further tergites and all sternites smooth and polished, with scattered hairs. Ovipositor shorter than abdomen (1:1.5).

Head (together with mandible), pronotum, mesonotum, and scutellum rusty-brown. Propodeum dark rusty-brown, otherwise thorax brownish-black. Abdomen rusty-brown, but somewhat darker than head-pronotum-mesonotum-scutellum. Legs yellow, hind tibia, first two metatarsi, joints of claw and hind tarsus fumous. Palpi pale yellow. First 34–37 joints of antennae rusty brown, 35–39 darkening, further ones black except 42–48 whitish joints. Wings hyaline, stigma yellowish-brown, veins brown or yellowish-brown.

Length 3.9–4 mm, alar expanse 8.6–8.8 mm.

♂ Differences from female: face with somewhat rougher punctuation, 1st tergite with fine longitudinal striation along keels, antennae without any whitish joints.

Length 3.8–4 mm.

Host unknown.

Locality Mt. Makiling, Luzon, Philippines, 3 ♀ (1 holotype and 2 paratypes) and 2 ♂ (paratypes), coll. BAKER.

Holotype and 2 female and 2 male paratypes in U. S. National Museum, Washington (USNM Typ nr. 69 262); 1 female paratype in Hungarian Natural History Museum, Budapest. Hym. Typ. nr. 312.

Remark. — 1 female paratype without any wing, antennae of all types incomplete or missing, hind tarsi of one male paratype missing.

**Phaenocarpa (s. str.) vicina sp. n., ♀ (figs. 31–33)**

The new species stands nearest to *P. pratellae* CURT. (Palaearctic Region), but differs from it by the following marks: outline of head and thorax (fig. 33), form and denture of mandible, venation of wing, outline first tergite, and colour of body. ♀ Head (fig. 33) transverse, ratio of its width and length as 2:1.3. Face with minute and dispersed punctation, otherwise head smooth and polished. Face, clypeus, and mandible hairy, otherwise head bare. Eyes of normal outline (not protruding), nearly round, bare. Ocelli in an equilateral triangle, base of triangle somewhat longer than sides. Tempora very narrow, its width equal with one-third of diameter of eye (0.26:1). Mandible's specific marks (fig. 31): upper tooth abscised, middle tooth tiny but spiky, lower tooth normal and spiky. Maxillar palpi almost as long as thorax. Antennae much longer than body but incomplete. Right antenna with 34, left one with 26 joints. Proportion of the first 3 flagellar joints as 1:1.2:0.87. Further joints gradually shortening.

Thorax normally (fig. 33), ratio of cephalic to thoracic width as 2:1.35, smooth and polished. Parapsides evenly distinct, shallower than dimple. Prescutellar furrow normally with 3 crenulae. Center of metanotum with a short spine. Propodeum carinate, however, without any sculpture. Sternauli of normal run, crenulate. Lower section of mesopleura and metapleura hairy, other surface of thorax at least with scattered and short hairs.

Wing longer than body (1.3:1). Stigma triangle, short,  $r_1$  issues from its hind third. Proportion of  $r_2$  and  $r_3$  as 1:2,  $r_2$  almost straight,  $r_3$  somewhat convex.  $Cu_2$  2.3-times longer than its width, distally narrowing. N. rec. interstitial, nurvulus postfurcal.

Legs slender and long, without any further specific mark.

Abdomen as long as thorax, its outline elongate. Proportion of thoracic (between tegulae) and abdominal width (at 2nd segment) as 1.7:1. 1st tergite (fig. 32) elongate trapezoid, almost twice longer than its width on hind margin (1:0.57). Spiracles on the fore third. Along the two fine keels with rugulosity, otherwise tergite 1 smooth and shiny. Further tergites and all sternites smooth and shiny, with scattered hairs. Ovipositor longer than abdomen (1:0.7), but shorter than body.

Body blackish-brown. Scape and pedicel brownish-yellow, first 5 flagellar joints darkening, 19–20th joints whitish, 18th and 21st joint dark rusty brown. Mesonotum, mesosternum, and middle longitudinal strip of sternites rusty brown. Mandible brownish-yellow. Palpi pale yellow. Prosternum, all coxae, and trochanters yellow. Legs from tibiae brownish-yellow, tarsi darkening. 1st tergite dark rusty brown. Wings hyaline, stigma and veins yellowish-brown. Antennae dark brown.

Length 3.7 mm, alar expanse 8.8 mm.

♂ and host unknown.

Locality Tjibodas, Mt. Gede, Java (Indonesia), 20 July 1909, 1 ♀ (holotype), coll. BRYANT & PALMER.

Holotype in the U. S. National Museum, Washington (USNM Typ. nr. 69 263).

**Supplement**  
***Aclisis cilipennis* CAM.**

*Aclisis? cilipennis* CAMERON, 1910, Wiener Entom. Ztg., 29, p. 10, ♂

The species was described from Darjiling, India.

Having examined the single male (and not female, as it is said in the original description) type (preserved in Zoologisches Museum, Berlin), I might establish that this species is not an Alysiine but an Exothecine Braconid wasp (with round clypeus, and margined tempora-occiput). So I transfere this species from the genus *Phaenocarpa* FÖRST. (subgenus *Aclisis* FÖRST.) into subfamily *Exothecinae* (genus *Exothecus* WESM.?).

**References**

ASHMEAD, W. H., 1905: New Hymenoptera from the Philippine Islands. — Canad. Entom., 37, p. 3-8. — ASHMEAD, W. H., 1906: Descriptions of new Hymenoptera from Japan. — Proc. U. S. Nat. Mus., 30, p. 169-201. — CAMERON, P., 1910: On some Asiatic species of the Braconid Subfamilies *Rhogadinae*, *Agathinae*, *Microgasterinae* and of the *Alysiidae*. — Wiener Entom. Ztg., 29, p. 1-10. — FISCHER, M., 1963: Neue Zuchtergebnisse von Braconiden (Hym.). — Ztschr. angew. Zool., 50, p. 195-214. — GAHAN, A. B., 1925: A second lot of parasitic Hymenoptera from the Philippines. — Phill. J. Sci., 27, p. 83-109. — NIXON, G. E. J., 1939: Notes on *Alysiinae*, with descriptions of three new species (Hym., Braconidae). — Proc. R. Entom. Soc. London, (B) 8, p. 61-67. — PAPP, J., 1966: New *Phaenocarpa* FÖRSTER Species from the Ethiopian Region (Hym., Braconidae). — Acta Zool., Budapest, 12, p. 133-144. — PAPP, J., 1967: An essay on the *Phaenocarpa* FÖRSTER Species of the Carpathian Basin, Central Europe. — Beitr. Entom., 17, in print. — PAPP, J., 1966: Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei, 101. *Braconidae*. — Acta Zool., 13, p. 191-226. — VIERECK, H. L., 1913: Descriptions of six new genera and twelve new species of ichneumon-flies. — Proc. U. S. Nat. Mus., 44, p. 639-648. — WATANABE, C., 1937: A contribution to the knowledge of the Braconid fauna of the Empire of Japan. — J. Fac. Agric. Hokkaido Imp. Univ., 42, p. 1-188. — WATANABE, C., 1957: Notes on Ashmead's Japanese *Braconidae* (Hymenoptera). — Insecta Mats., 21, p. 1-5.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Reichenbachia](#)

Jahr/Year: 1966-1968

Band/Volume: [8](#)

Autor(en)/Author(s): Papp Jenö

Artikel/Article: [A Synopsis of the Phaenocarpa Forst. Species of the Oriental Region \(Hymenoptera, Braconidae, Alysiinae\) 139-157](#)