

DESCRIPTIONS OF NEW ASIATIC GYRINIDAE.

By GEORG OCHS, *Frankfurt a-Main.*

My request for the loan of collections of Gyrinid beetles in the various institutions in India and abroad was very courteously responded to by the authorities in charge of these collections and I have, therefore, been able to examine very large collections from different areas. In the present paper only the new species of Gyrinids from these collections are described, while the faunistic records and other synonymic details will be published later in the "Catalogue of Indian Insects." I also hope later to publish a detailed work on the Indian members of the family Gyrinidae. I have examined the collections of the Forest Research Institute, Dehra Dun, U. P.; Raffles Museum, Singapore; Zoological Survey of India, Indian Museum, Calcutta; Agricultural Research Institute, Pusa, Bihar; Government Museum, Madras; Colombo Museum, Colombo, Ceylon; and the Government Entomologist, Coimbatore, S. India; and my thanks are due to Dr. C. F. C. Beeson, Dr. F. N. Chasen, Dr. B. N. Chopra, Mr. T. Bainbrigge Fletcher, Dr. F. H. Gravely, Mr. G. M. Henry and Rao Saheb Y. Ramachandra Rao, for their kindness in sending me the collections under their charge.

***Orectochilus fruhstorferi* Rég.**

1907. *Orectochilus Fruhstorferi*, Régimbart, *Ann. Soc. Ent. France* LXXVI, p. 194

subsp. ***intermedius***, nov.

Long. $9\frac{1}{2}$ — $12\frac{1}{2}$ mm. *O. fruhstorferi* fere omnino similis colore minus coerulescente, magis aeneo ut in *O. cardiophorus* Rég.¹ Spatio laevi in elytris minus extenso quam in *fruhstorferi*, caeterum illo valde simili, magis extenso quam in cardiophoro. Tibiis anticis ut in *O. fruhstorferi*.

Habitat: Sukli, east side of Dawna Hills, ca. 2100 ft., 22—29. XI. 1911 (F. H. Gravely coll.).

Types: a series of 8 specimens in the collection of the Indian Museum; cotypes in my collection.

The Sukli specimens differ from the typical form (described from Tonkin, Montes Mauson) in the shape of the smooth part of elytra, which reaches further backwards in *fruhstorferi* and in the somewhat brassy colour of the surface, which is evidently bluish in the typical form. The subspecies *intermedius* thus approaches *O. cardiophorus* Rég., which is, however, generally smaller in size and less convex in form. The shape of the smooth part of elytra is also different being shorter and more strongly constricted apically in *O. cardiophorus*. The anterior tibiae of *O. cardiophorus* further differ from those of the subspecies de-

¹ Régimbart, *Ann. Mus. Genova* (2) VI, p. 620 (1888); *l.c.* X p. 548 (1891); *Ann. Soc. Ent. France* LX, p. 693, pl. xviii, fig. 6 (1891). Also see Zimmermann, *Ent. Mitteil.* pp. 165, 166 (1917) and Peschet, *Opusc. Inst. Sci. Saigon* I p. 7 (1923).

scribed above in being produced somewhat outwards at their exterior apical angle.

Orectochilus desgodinsi Rég.

1886. *Orectochilus Desgodinsi*, Régimbart, *Ann. Soc. Ent. France* (6) VI, p. 260, pl. iv, fig. 10.

1891. *Orectochilus Desgodinsi*, Régimbart, *Ann. Soc. Ent. France* LX, p. 691.

1907. *Orectochilus Desgodinsi*, Régimbart, *Ann. Soc. Ent. France* LXXVI, p. 193.

subsp. **assamensis**, nov.

Long. $9\frac{1}{2}$ — $11\frac{1}{2}$ mm. Forma typica paulo major, magis convexus; posterius minus depressus. Spatio laevi in pronoto elytrisq̄ paulo magis lato, posterius minus constricto atque acuminato.

Habitat: Assam, Garo Hills, from hill streams above Tura, 3800 ft., VIII. 1917 (S. Kemp coll.).

Types: 1 ♂, 4 ♀ in the collection of the Indian Museum; cotypes in my collection. I have another specimen from "Assam" in my collection. The 2 specimens from Khasia Hills in the Berlin Museum mentioned by Régimbart¹ are also probably to be referred to this subspecies.

Generally the Assam specimens are larger in size than those of the typical form, more convex and less depressed posteriorly. The smooth part is evidently broader in the prothorax and the elytra, on the latter it is less constricted and less acuminate posteriorly. The typical form is known from Sikkim: Pedong; Darjeeling Dt.: Kalimpong, Mongpoo, Sureil; Bihar: Buxar.

Orectochilus coimbatorensis, sp. nov.

Long. $10\frac{1}{2}$ — $11\frac{1}{2}$ mm. ♂ ovalis, paululum elongatus, postice attenuatus, convexus; ♀ breviter ovata, lata, elytris postice late truncatis, convexa. Supra niger, leviter aenescens, nitidus, pubescentia auro-grisea; infra niger, abdomine, epipleuris, pedibusque natatoribus infuscatis. Labro brevi, transverso, antice parum rotundato et pilis rufis instructo, postice punctato et piloso; capite vix visibiliter reticulato et tenuiter remote punctato; prothorace et elytris reticulatione fere nulla, sed punctis minutis remotis instructis, apud feminam elytris in regione glabro posteriore utrinque magna plaga fortiter reticulata instructis. Margine tomentoso prothoracis sat lato, antice latiore, in elytris continuato, eodem in ♂ post humeros fortiter dilatato et undulatim suturam circiter ad tertiam partem attingente, spatio laevi subcordiformi, postea ad suturam breviter acuminato. Apud ♀ margine tomentoso ad humeros angustato, postea angustissimo et parallelo, ad quintam partem rectangulariter intus dilatato et paululum undulatim suturam eadem longitudine attingente; spatio laevi postea fere recte truncato, in suturam anguste acuminato. Truncatura elytrorum paululum concava, angulo externo vix prominulo, suturali magis prominulo et acuto. Tibiis anterioribus in ♂ latis brevissimis, extus arcuatis, ad apicem valde oblique truncatis, angulo externo paululum sed evidenter prominulo, in ♀ subparallelis, ad basin extus attenuatis, ad

¹ Régimbart, *Ann. Soc. Ent. France* LXXVI, p. 193 (1907).

apicem fere recte truncatis, angulo externo fere recto, leviter rotundato; tarsi in ♂ robustis subparallelis, in ♀ minus latis.

Habitat: South India, Tinnevelly Hills, 3-12. VII. 1921 (Ramakrishna coll.)

Types: in the collection of the Agricultural College and Research Institute, Coimbatore; cotypes in my collection.

In this species there is an exceptionally well marked distinction between the sexes. While in *Orectochilus* the males are mostly larger in size and more robust than the females, the male of *coimbatorensis* is smaller and of a more graceful form than the female, which is broader and shorter. There is moreover a great difference in the shape of the lateral pubescence of the elytra, the smooth part in the male is almost heart-shaped, while in the female it is very broad anteriorly and nearly straightly truncate behind. In the female moreover there is an alutaceous sculpture on the posterior smooth part of each elytron. The feature of the anterior tibiae of the male is very striking, as they are exceptionally short and strongly arcuate exteriorly. The tarsi of males are very robust and nearly as long as the tibiae. *O. coimbatorensis* should not, therefore, be difficult to recognize though the male is perhaps likely to be confounded with *O. semivestitus* Guérin,¹ which occurs in the vicinity of its region, but the latter is a less convex, more elongate species, with a rough alutaceous sculpture on the surface.

***Orectochilus cameroni*, sp. nov.**

Long. 6—6½ mm. Ovalis, leviter elongatus, postice ab humeros leviter attenuatus, parum convexus. Supra niger, ad latera fulvotomentosus, subtiliter reticulatus (aerolis in elytris evidenter transversis) et tenuiter punctulatus (rarius et obsoletissime in elytris). Infra piceoferrugineus, epipleuris abdomineque dilutioribus, pedibus rufis. Labro brevissimo, transversali; margine tomentoso in pronoto post oculos valde dilatato, in elytris antice paulo angustiore, postea in ♂ rectilineariter et regulariter dilatato, suturam ante apicem attingente, in ♀ circiter ad medium subito lobatim intus producto, postea parallelo, denique flexuose suturam ante apicem attingente. Spatio laevi in ♂ longe triangulari, in ♀ antice cordato, postice angustato, parallelo et trilobatim terminato. Truncatura obliqua, angulo externo obtuso, vix deleta, suturali subacuto, subprominulo. Tibiis anterioribus latis, triangularibus, ad basin abrupte angustatis, in ♂ latioribus atque ad apicem oblique truncatis, angulo apicali externo in ♂ extus producto sed rotundato, in ♀ latissime rotundato; tarsi in ♀ subparallelis, in ♂ late ovalis.

Habitat: West Himalayas, Dehra Dun, Kaligad, 10. VII. 1921 (Dr. Cameron coll.).

Types: 1 ♂, 3 ♀ in the collection of the Forest Research Institute, Dehra Dun and in my collection. Further examples are known from Mussoorie, Arni Gad, 13. IV. 1922 (Cameron) which are of the same type. Some specimens from Bhowali, Kumaon, U. P., 11. V. 1912 (Forest Zool. coll.) are a little smaller in size and have the lateral margin slightly

¹ Guérin, *Rev. Zool.* p. 38 (1840). Also see Régimbart, *Ann. Soc. Ent. France* (6) II, 1. X, fig. 4 (1882), and *l.c.* (6) III, p. 413, pl. xii, figs. 123, 123a (1883).

rufescent posteriorly, somewhat resembling that of *O. figuratus*, Rég.¹ which has however a pronounced red-yellow margin in the prothorax and the elytra. The shape of the smooth portion of the elytra of the females is very similar in the two species, *O. cameroni* is however larger in size and darker coloured. The anterior legs of the two species are also different. The smooth portion of the elytra of the male is similar in shape to that of *O. trianguliger* Rég.,² to which it seems nearly related.

Orectochilus parkeri, sp. nov.

Long. $5\frac{1}{2}$ —6 mm. Oblongo-ovalis, elongatus, postice ab humeros leviter attenuatus, modice convexus. Supra niger, elytris in disco-castaneis, ad latera griseo-tomentosus, flavo-marginatus, reticulatus et tenuiter punctulatus (rarius et obsolete in elytris). Infra piceus, segmento anali abdominis ferrugato, epipleuris flavis, pedibus rufis. Labro brevissimo transversali, antice minime rufescente; margine tomentosus in pronoto multo latiore antice quam postice, in elytris continuato, antice parum lato, postea regulariter dilatato et suturam paululum ante apicem attingente, spatio laevi cordiformi; truncatura fere recta, angulo suturali recto, externo obtuso, vix deleto. Tibiis anticis sat latis, ad basin abrupte angustatis, postea subparallelis, in ♂ latioribus, angulo apicali externo in ♂ recto, in ♀ rotundato; tarsis in ♀ subparallelis, in ♂ multo latioribus, ovatis, ad apicem attenuatis.

Habitat: West Himalayas, Almora, U. P., Ganai, 5000 ft., 1. VIII, 1923 in a stream (Parker coll.)

Types: 1 ♂, 4 ♀ in the collection of the Forest Research Institute, Dehra-Dun and in my collection.

Nearly related to *O. oblongiusculus* Rég.³ and is perhaps only a race of this very variable species. It is, however, distinguished by its darker colour and the pubescence, which is whitish in *O. parkeri*, golden in *O. oblongiusculus*. It is also larger and the form slightly more convex than in the latter.

Orectochilus cavernicola, sp. nov.

Long. $4\frac{1}{4}$ — $4\frac{3}{4}$ mm. Ovalis, postice leviter attenuatus, modice convexus. Supra nigra-piceus, luteo limbatus, pubescentia auro-grisea reticulatus et remote punctulatus, aerolis in capite et pronoto fere rotundatis, in elytris magis transversalis; infra fuscus, pedibus ferrugineis. Labro transversali brevissimo, pronoto utrinque sat late, multo latius antice, punctato-tomentoso, margine tomentosus in elytris antice eadem latitudine, postice dilatato et suturam ad tertiam partem attingente, spatio laevi subcordiformi; truncatura fere recta, angulis rectis haud prominulis. Tibiis anticis in ♂ sat latis, ad basin abrupte angustatis, postea subparallelis, angulo apicali externo anguste rotundato, tarso ovato, antice attenuato; in ♀ tibiis anticis minus latis, tarsis angustis et subparallelis.

¹ Régimbart, *Ann. Soc. Ent. France* LX, p. 698, pl. xviii, fig. 10 (1891), l. c. LXXVI, p. 199 (1907). Also see Zimmermann, *Ent. Mitteil.* p. 167 (1917).

² Régimbart, *Ann. Soc. Ent. France* LX, p. 696, pl. xviii, fig. 9 (1891).

³ Régimbart, *Ann. Soc. Ent. France* (6) VI, p. 262, pl. iv, fig. 11 (1886), also see l. c. LX, pp. 697, 698 (1891) and l. c. LXXVI, p. 199 (1907).

Habitat : Assam, Garo-Hills, Siju-Cave, February, 1922, 400 ft., 2100 ft. and 3600 ft. from entrance (S. Kemp and B. N. Chopra coll.).

Types : 2 ♂, 4 ♀ in the collection of the Indian Museum ; cotypes in my collection.

Of much smaller size, more convex, and of darker colour than *O. oblongiusculus*, Rég., to which *O. cavernicola* is nearly related ; the smooth portion of the elytra is less cordiform in the latter, especially in the female sex.

***Orectochilus choprae*, sp. nov.**

Long. $6\frac{1}{4}$ – $6\frac{3}{4}$ mm. Oblongo-ovalis, post humeros leviter oblique attenuatus, modice convexus. Supra nigro-piceus nitidus, ad latera punctato-tomentosus, flavo-marginatus ; infra piceo-ferrugineus, abdomine rufescente, epipleuris flavis, pedibus rufis. Labro rufo, brevissimo et transversali, punctato et piloso, antice laevi ; clypeo antice rufo-marginato. Capite reticulato et remote punctato, aerolis leviter transversis, antice rotundatis, reticulatione in pronoto minus distincta, in elytris subtilissima, aerolis valde transversalis. Margine tomentoso in pronoto sat lato, post oculos dilatato, in elytris continuato, post humeros regulariter dilatato et suturam ante apicem attingente ; spatio laevi longe cordiformi, postea acuminato. Truncatura fere recta, angulo suturali angustissime rotundato, angulo externo obtuso et rotundato. Tibiis anticis brevibus, intus ad basin valde attenuatis, in ♂ late triangularibus, in ♀ multo minus latis, angulo externo apicali late rotundato et denticulato, tarso in ♂ late ovali, ad apicem attenuato, in ♀ angustissimo et parallelo.

Habitat : Assam, Garo Hills, Siju Cave, February 1922 (S. Kemp and B. N. Chopra coll.).

Types : 1 ♂ 200 ft. from entrance, 2 ♀ 400 and 2,000 ft. from entrance in the collection of the Indian Museum ; cotypes in my collection.

Nearly related to *O. oblongiusculus*, Rég., but larger in size and darker coloured. It is also distinguished by the transverse alutaceous sculpture in the elytra and the shape of the lateral pubescence, which is broader posteriorly in *choprae*. The smooth part of the elytra is more constricted posteriorly, shorter and more evidently heart-shaped. *O. patellimanus*, Rég.¹ from Perak seems to be very similar, but is distinguished chiefly by its very robust anterior legs and the shape of the smooth part in elytra.

***Orectochilus melli*, sp. nov.**

Long. $9\frac{1}{2}$ –11 mm. Ovalis, sat elongatus, antice et postice attenuatus, convexus. Supra nigro-aeneus, ad latera punctato-tomentosus et rufo-marginatus ; infra niger, abdomine leviter ferrugato, epipleuris pedibusque rufis. Labro transverso, parum arcuato, punctato-piloso, antice longe flavociliato ; capite et prothorace reticulatis et tenuiter punctatis ; elytris reticulatis, punctis minimis permultis et majori-

¹ Régimbart, *Ann. Soc. Ent. France* LXXVI, p. 202 (1907), also see. Oc's. *Ent. Blätter* XX, p. 238 (1924).

bus multo minus crebris impressis, in disco lineis sex laevibus parum distinctis. Margine tomentoso in prothorace sat lato, post oculos valde dilatato. in medio sinuato, a prothorace in elytris continuato, ad humeros leviter angustato, postea sat regulariter oblique et subundulatim dilatato, suturam ante apicem attingente. Truncatura leviter obliqua, extus leviter sinuata, angulo suturali recto, externo anguste rotundato subprominulo. ♂ Tibiis anticis latis, brevibus, ad basin intus attenuatis, angulo apicali externo anguste rotundato, paululum prominulo et denticulato; tarso late ovali, ad apicem attenuato; margine tomentoso postice paulo latiore.

Habitat: China, Kuang-tung province, Tsha-jiu-san hill tracts, ca. 1400 m. alt. in bamboo forest, VIII. 1910 (Mell coll.).

Types: 3 ♂, 1 ♀ in my collection.

Nearly related to *O. birmanicus* Rég.¹ and to *O. sublineatus* Rég.² In the description of the latter the author cites a somewhat different specimen from South China in the collection of the Brussels Museum, which is probably identical with the above described new species. The resemblance to *O. birmanicus* is very great, in the latter, however, the smooth lines on the elytra are wanting by which *O. melli* is easily distinguished. In *O. sublineatus*, which is less robust, the lateral pubescence is narrower than in *O. melli*, the smooth portion of the elytra is therefore more broadly oval behind. In the males of *O. melli* the exterior apical angle of the anterior tibiae is somewhat prominent, and in this species the sculpture on the surface is much more rough than in either of its two allies.

Orectochilus kempii, sp. nov.

Long. 6—7 mm. Ovalis, ad humeros modice inflatus, postice magis quam antice attenuatus. Supra niger, nitidus, subtiliter reticulatus et tenuiter punctulatus, ad latera punctato-tomentosus, rufo marginatus; infra nigro-ferrugineus, pedibus rufis, epipleuris flavis. Labro brevi, antice arcuato; margine tomentoso in prothorace parum lato, antice multo latiore, in elytris continuato, postea regulariter dilatato et suturam paulo ante apicem attingente. Truncatura fere recta angulis subobtusis nec prominulis. Tibiis anticis modice dilatatis angulo externo apicali rotundato, tarsis in ♂ parum dilatatis, subparallelis.

Habitat: Yambung, 1100 feet, bank of stream, 15-I-1912 (Abor Exp., Kemp coll.).

Types: 1 ♂, 3 ♀ in the collection of the Indian Museum; cotypes in my collection.

Resembles *O. discifer* Walker³, but is broader in the humeral region and more attenuated on both ends. The smooth part of elytra reaches further backwards and is broadly oval behind like that in *O. cribratellus* and in *O. metallicus*, from which, however, *O. kempii* may be easily distinguished, especially by the superficial sculpture on the surface.

¹ Régimbart, *Ann. Mus. Genova* (2) X, p. 550, pl. xviii, fig. 7; *Ann. Soc. Ent. France* LX, p. 694 (1891).

² Régimbart, *Ann. Soc. Ent. France* LX, p. 695 (1891).

³ Walker *Ann. Mag. Nat. Hist.* (3) IV, p. 91, (1859). Also see Redtenb., *Reise Novara* II, p. 24, pl. i, fig. 11 (1867) and Régimbart, *Ann. Soc. Ent. France* (6) III, p. 416 (1883).

Orectochilus neglectus, sp. nov.

Long. $5\frac{1}{4}$ mm. Ovalis, parum elongatus, antice et postice attenuatus, modice convexus. Supra niger, nitidissimus, ad latera punctato-tomentosus, pubescentia auro-grisea, anguste flavo-marginatus; infra piceo-ferrugineus, epipleuris flavis, pedibus rufis. Labro antice rotundato nigro, punctato-piloso, antice pilis longioribus flavis instructo; capite reticulato et remote punctato; prothorace subtiliter transversim reticulato; reticulatione in elytris vix visibili, valde transversali et obliqua. Margine tomentoso in pronoto sat lato, post oculos latiore, in elytris continuato, postea (paululum oblique apicem versus) dilatato et suturam paulo ante apicem attingente; spatio laevi ovali, postice leviter acuminato. Truncatura fere recta, angulis rectis. Tibiis anticis longe triangularibus, ad basin attenuatis, postea subparallelis, in ♂ modice dilatatis, angulo externo apicali rotundato et denticulato; tarsis in ♀ angustis et subparallelis, in ♂ parum dilatatis, ad apicem attenuatis.

Habitat : Base of West Himalayas, Naini Tal Dt., Bareni, 1-IV-1910.

Type in the collection of the Indian museum; cotype in my collection. Further specimens examined are from Naini Tal Dt., Kiari, 24-III-1910; Umbala Dt., Kalka, 16-V-1911 from small pond near cultivation (Annandale coll.); Kumaon, Kathgodam, 1200 ft., 2-V-1911 (Kemp coll.); Patiala State, Base of Simla Hills, Dharampur Koa, 21-VII-1911 (Annandale coll.), all in the collection of the Indian Museum. A single specimen from Almora Dt., Dwaharat, 5000 ft., 20-VI-1923 (R. N. Parker coll.) in the collection of the Forest Research Institute at Dehra Dun has an evident whitish pubescence.

It is very similar in general form to *O. limbatus* Reg., but larger in size; a little larger than *O. lucidus* Reg.² and less convex than the latter. It is moreover to be distinguished by the shape of the smooth part in elytra, which is evidently acuminate posteriorly in *O. neglectus*, and regularly oval in the two allied species.

Orectochilus gravelyi, sp. nov.

Long. $4\frac{1}{2}$ —5 mm. Ovalis, sat elongatus, antice et postice attenuatus, sat convexus et compressus. Supra niger, nitidus, ad latera punctato-tomentosus, flavo-marginatus; infra nigricans, epipleuris flavis, pedibus rufis. Labro nigro semicirculari, punctato et piloso, antice laevi. Capite fortiter reticulato (aerolis rotundatis, postea magis transversis) et remote punctato, prothorace subtiliter transversim reticulato, in elytris reticulatione vix visibili, maxime transversali et obliqua. Margine tomentoso in prothorace sat lato, post oculos dilatato, in elytris continuato, post humeros regulariter dilatato et suturam ante apicem attingente; spatio laevi ovali. Truncatura paululum obliqua, angulo suturali fere recto, externo obtuso et rotundato. Tibiis anticis sat robustis, triangularibus (in ♂ latioribus), angulo externo apicali valde rotundato et denticulato; tarsis in ♂ oblongis, in ♀ angustis et subparallelis.

⁴ Régimbart, *Ann. Soc. Ent. France* (6) III, p. 424 (1883); *l. c.*, LXXVI, p. 211 (1907).

⁵ Régimbart, *Ann. Soc. Ent. France* (6) III, p. 425, pl. xii, fig. 131 (1883); *l. c.*, LX, p. 704 (1891); *l. c.*, LXXVI, p. 210 (1907).

Habitat: Chota Nagpur, Chaibassa River, 30-XII-1910 (F. H. Gravely coll.).

Types: a series of 12 specimens in the collection of the Indian Museum; cotypes in my collection. Further examples were seen from Chota Nagpur, Singhboom Dt., Chaibassa, 2-3-III-1913 (Gravely coll.); Ratnagiri Dt., Vashishti Valley, Pophli, ca. 400 ft., 1-2. V 1912 (Gravely coll.); Satara Dt., Yenna Valley, Medha, 17-23-IV-1912 (Gravely coll.); Satara Dt., Koyna Valley, Helvak, ca. 2000 ft., 28-30-IV-1912 (Gravely coll.).

Very similar in form to *O. haemorrhous* Rég.,¹ particularly its rather elongate shape and the labrum which is nearly as strongly produced; the outline of the smooth part on the elytra is however nearly regularly oval in *O. gravelyi*. In these characters it approaches *O. neglectus* Ochs and *O. limbatus* Rég.,² which are however less elongate and have the labrum less produced. In the latter moreover the lateral pubescence is regularly broadened, the inner outline being concavely curved from the humeral part to the apex. In *O. gravelyi* it is somewhat undulate slightly convex in the median part

Orectochilus scalaris Rég.

1880. *Orectochilus scalaris*, Régimbart, *Notes Leyden Mus.* II, p. 215.

1883. *Orectochilus scalaris*, Régimbart, *Ann. Soc. Ent. France* (6) III, p. 430, pl. xii, figs. 134, 134a.

1887. *Orectochilus scalaris*, Régimbart, *Midd. Sumatra* IV, p. 12, pl. i, fig. 11.

1891. *Orectochilus scalaris*, Régimbart, *Ann. Soc. Ent. France* LX, p. 705.³

Of this very variable species Régimbart has noted three different forms, which in my opinion are sufficiently distinct to be considered as representing separate subspecies.

The typical form is represented by the specimens from Java and Sumatra, on which the species was described.

subsp. **andamanarum** nov.

Forma typica major, pubescentia laterali elytrorum posterius unilatim dilatato, suturam secundum truncaturam ante apicem attingente.

Habitat: Andaman Islands.

Types in the collection of the Indian Museum.

The Andaman specimens are averagely larger in size than the typical ones, the shape of the lateral pubescence in elytra differs as illustrated by figs. 134 and 134a on pl. xii in *Ann. Soc. Ent. France* (6) III (1883).

subsp. **parvulus**, nov.

Forma typica minor, magis elongatus et parallelus, pubescentia laterali elytrorum fere ut in forma typica.

¹ Régimbart, *Ann. Soc. Ent. France* LX, p. 706, pl. xviii, figs. 13, 13a (1891).

² Régimbart, *Ann. Soc. Ent. France* (6) III, p. 424 (1883); *l. c.* LXXVI, p. 211 (1907).

³ See also Zimmermann, *Ent. Mitteil.* p. 168 (1917), and Peschet, *Opusc. Inst. Sci. Saigon* I, p. 11 (1923).

Habitat: Lower Burma, Amherst Dt., Kawkareik to third camp, 21-XI—1-XII-1911 (F. H. Gravely coll.).

Types in the collection of the Indian Museum; cotypes in my collection. Recorded by Régimbart from Thagata and Kawkareik (coll. Fea, 1887). The specimens from these localities are much smaller in size than those of the typical form, they are more elongate and have evidently more parallel sides. The shape of the lateral pubescence in elytra is similar to that of the typical specimens.

Orectochilus fletcheri, sp. nov.

Long. $4\frac{1}{2}$ —5 mm. Ovalis, antice et postice attenuatus, ad humeros leviter inflatus, valde convexus. Supra nitidus, nigro-aeneus, ad latera punctato-tomentosus, flavo marginatus; infra nigricans, abdomine rufescente, epipleuris flavis, pedibus rufis. Labro semicirculari producto, nigro, reticulato et punctato, ciliis flavis, antice longioribus instructo. Capite magno, fortiter reticulato (aerolis rotundatis) et remote punctato. Prothorace eodem modo reticulato, ad latera late punctato-tomentoso. Elytris subtiliter transversim reticulatis et punctis remotis sat fortis instructis, margine tomentoso antice sat angusto, paulo ante medium subito intus dilatato et paululum lobatim antea producto, postea in ♂ regulariter dilatato et suturam paulo ante apicem attingente, in ♀ postea minus dilatato, margine laterali fere parallelo, angulum suturae anguste secundum truncaturam attingente. Truncatura fere recta, extus paululum sinuata, angulo suturali recto, externo subobtusato. Tibiis anticis rectis subparallelis angulo externo apicali anguste rotundato, tarso in ♂ dilatato oblongo, in ♀ subparallelo.

Habitat: S. Malabar, Kollengode, 28-XII-1919, from tank-bund (N. K. M. coll.).

Types: 2 ♂, 6 ♀ in the collection of the Agricultural Research Institute at Pusa; cotypes in my collection.

Closely related to *O. haemorrhous* Régimbart,¹ but less elongate and rather broader in shape. The lateral pubescence has only one lobe, which is situated at about one-half of the length of elytra and is regularly and concavely broadened from there to the apex. In the males the pubescence is more broadened in its posterior portion than in the females. In these respects and in general appearance *O. fletcheri* still more resembles *O. africanus* Ochs,² which is, however, more elongate, less strongly alutaceous and has the lateral pubescence of elytra less strongly broadened towards the apex.

Orectochilus marginipennis Aubé.

1838. *Orectochilus marginipennis*, Aubé, *Spec. Coleop.* VI, p. 744.

1883. *Orectochilus marginipennis*, Régimbart, *Ann. Soc. Ent. France* (6) III, p. 429, pl. xii, figs. 133, 133a.

1891. *Orectochilus marginipennis*, Régimbart, *Ann. Soc. Ent. France* LX, p. 704.

1891. *Orectochilus marginipennis*, Régimbart, *Ann. Mus. Genova* (2) X, p. 550.

1907. *Orectochilus marginipennis*, Régimbart, *Ann. Soc. Ent. France* LXXVI, p. 214.

As already mentioned by Régimbart there is a difference between the specimens from Java and Sumatra and those from the Asian main-

¹Régimbart, *Ann. Soc. Ent. France* LX, p. 706, pl. xviii, figs. 13, 13a (1891).

²Ochs, *Ent. Blätter*, XIX, p. 169 (1923).

land, which chiefly concerns the latitude of the lateral pubescence in elytra, which in the insular specimens reaches posteriorly the sutural angle. In the mainland specimens it is posteriorly less broadened, reaching the truncature at about two-thirds of its width, and continued to the sutural angle only by a narrow prolongation along the truncature. The mainland specimens are also larger in size and more shining.

As the species was described by Aubé from Javan specimens, these must be considered as the typical form, the Sumatran specimens do not seem to be different and those from Perak in my collection approach them very nearly.

O. subsulcatus Rég.¹ is a synonym of this species. I describe below two new subspecies.

subsp. **angustilimbus**, nov.

Long. $5\frac{1}{2}$ —6 mm. Forma typica major, supra nitidior, pubescentia laterali in elytris minus extensa, posterius minus dilatata.

Habitat: Dehra Dun, U. P., West Himalayas, Lachiwala, 8-IV-1923 (Cameron).

Types: in the collection of the Forest Research Institute at Dehra Dun; cotypes in my collection.

A single female from Assam in my collection is nearly of the same type and is probably very similar to the specimens collected by Fea in Burma.²

subsp. **parvilimbus**, nov.

Long. $4\frac{1}{2}$ mm. Forma typica minor, pubescentia laterali in elytris posterius minime dilatato.

Habitat: China, Canton Province, Tsha-jiu-san, ca. 1400 m. alt. in bamboo-forest, VIII-1910 (Mell coll.).

Type: 1 ♂ in my collection of very small size. The lateral pubescence in elytra is only scarcely broadened posteriorly, the smooth part of elytra very broadly oval.

Orectochilus cylindricus Rég.

1891. *Orectochilus cylindricus*, Régimbart, *Ann. Soc. Ent. France* LX, p. 713.

♀ Masculo fere omnino similis, paulo major, elytris indistincte longitudinaliter striatis, tarsis minus latis.

Types ♀ from Pusa (Bengal) in the collection of the Agricultural Research Institute at Pusa and in my collection.

The species was described by Régimbart from a single male from Bengal: Murshidabad. A small series of *Orectochilus* received from Pusa, in which specimens of the above species were mixed with *O. gangeticus* Wied., contained some females, which are to my knowledge the first females of this species which have ever been collected. Contrary to Régimbart's conjecture there is no difference in the shape of the lateral pubescence in the two sexes; the females are however larger in size than the males and show on the elytra some indistinct longitudinal

¹ Régimbart, *Notes Leyden Mus.* II, p. 215 (1880) and *Midd. Sumatra* IV, p. 12, pl. i, fig. 10 (1887).

² Régimbart, *Ann. Soc. Ent. France* LX, p. 704 (1891).

striae, which are scarcely visible in the males. The anterior tarsi are only scarcely enlarged in the males of this species.

***Orectochilus coronatus*, sp. nov.**

Long. 6 mm. Oblongo-ovalis, sat elongatus, ad humeros modice inflatus, postice valde attenuatus, ad suturam valde convexus. Supra niger, leviter aenescens, flavo-marginatus, ad latera et postice punctato-tomentosus; infra nigricans, epipleuris flavis, pectore medio, abdomine pedibusque rufis, pygidio rufo. Labro semicirculari sat producto, antice rufo-marginato et longe flavo-ciliato, supra modice punctato et piloso, subtiliter transversim reticulato. Capite magno reticulato (aerolis rotundatis), prothorace et elytris eodem modo reticulatis, elytrorum spatio laevi sexstriato. Margine tomentoso in prothorace sat angusto, antice latiore, in elytris ad humeros angustissimo, postea fortiter et leviter undulatum dilatato, ad quartam partem subito lobatum intus producto et suturam multo ante apicem attingente, spatio laevi elytrorum postea trilobato. Truncatura convexa, extus sinuata, angulo externo acuto et leviter prominulo. Tibiis anticis rectis, sat debilibus, angulo externo apicali deleto, tarso subparallelo.—♂ ignotus.

Habitat: N. E. Assam, Sadiya, Dikrang River, 26-XI-1911 (Abor Expedition, Kemp coll.).

Type: 1 ♀ in the collection of the Indian Museum.

It resembles the female of *O. vitalisi* Peschet¹ in general appearance but is more elongate and strongly attenuated towards apex, approaching in form *O. undulans*, *O. cylindricus* and *O. gangeticus*. Further it differs from *O. vitalisi* in the shape of the smooth part of elytra, which is narrower in *O. coronatus* and evidently trilobed at the apex.

***Orectochilus annandalei*, sp. nov.**

Long. 8—8 $\frac{3}{4}$ mm. Ovatus, elongatus, ad humeros modice inflatus antice et postice sat attenuatus, valde convexus. Supra niger, nitidissimus, ad latera punctato-tomentosus, flavo-marginatus; infra niger, ano pedibusque natatoribus ferrugatis, epipleuris flavis. Capite magno, antice subtilissime reticulato et punctis remotis instructo; clypeo fortius reticulato; labro modice producto, antice rotundato, supra reticulato et punctato, ciliis flavis, antice longioribus, instructo. Prothoracis margine tomentoso sat lato, antice multo latiore, elytrorum ante medium angusto, circiter ab medio dilatato et truncaturam ad tertiam partem attingente, in ♀ postea margine externo parallelo, in ♂ ad apicem magis suturam versus dilatato. Elytris laevis ad apicem (in ♀ fortius) subtiliter transversim reticulatis; truncatura obliqua, paululum convexa, angulo externo valde acuto, spinoso et producto, interno angustissime rotundato. Tibiis anterioribus subparallelis, ad basin fortiter attenuatis et paululum sinuatis, fere recte truncatis, angulo externo apicali paulatim rotundato, in ♂ evidenter extus producto. Tarso in ♂ sat late ovali, ad apicem attenuato, in ♀ multo angustiore et subparallelo.

¹ Peschet, *Opusc. Inst. Sci. Saigon* I, p. 14 (1923).

Habitat: South India, Travancore, w. side of Western Ghats, Tenmalai, 22-XI-1908 (Annandale coll.).

Types: 3 ♂, 1 ♀ in the collection of the Indian Museum; cotypes in my collection.

Very similar to *O. indicus* Rég.,¹ which is, however, a little smaller in size, but the labrum is more prominent in *O. indicus*, the exterior apical angle of elytra less spinously produced than in *O. annandalei*. It is also nearly related to *O. spiniger* Rég.,² but is to be distinguished by its less prominent labrum, the evidently rounded sutural angles of the elytra, the characteristic anterior tibiae of the male and the somewhat different shape of the lateral pubescence.

¹ Régimbart, *Ann. Soc. Ent. France* (6) III, p. 435, pl. xii, fig. 141; *l. c.*, LX, p. 714 (1891); *l. c.*, LXXVI, p. 217 (1907). Also see Zimmermann, *Ent. Mitteil.* p. 168 (1917).

² Régimbart, *Notes Leyden Mus.* II, p. 214 (1880); *Ann. Soc. Ent. France* (6) III, p. 436, pl. xii, fig. 139 (1883); *l. c.*, LX, p. 715 (1891); *Midd. Sumatra* IV, p. 12, pl. i, fig. 9 (1887). Also see Peschet, *Opusc. Inst. Sci. Saigon* I, p. 9 (1923).