

## THE GENUS *ANCYLOPUS* IN ASIA AND EUROPE (Coleoptera: Endomychidae)<sup>1</sup>

By H. F. Strohecker<sup>2</sup>

*Abstract*: Asiatic and European material of *Ancylopus* is arranged as 5 species: *A. melanocephalus* (Oliv.) in S. Italy and Sicily, *A. ceylonicus* Strkr. in S. India and Ceylon, *A. pictus* (Wied.) and *A. phungi* Pic of wide distribution in Asia, and *A. glaberrimus* new species in W. Irian. Six subspecies of *pictus* are recognized, the nominate in Java and Borneo, *plicatus* Pic in Sumatra, and 4 new subspecies, *philippinicus* in Mindanao, *papuanus* in New Guinea and Moluccas, *asiaticus* from Tonkin to Nanking, Taiwan and Japan, *indianus* in N. India. Nominate *A. phungi* Pic occurs from Tonkin to Hangchow and Japan. A new subspecies, *borealior*, is based on Nanking material.

Of 8 specific names catalogued under *Ancylopus* by Csiki in 1910 all but that of the type-species were removed to *Indalmus* by Arrow in 1920. Additional transfers to *Indalmus* of specific names combined with *Ancylopus* by Pic appear in my catalogue of 1953. The insect described by me in 1951 as *Ancylopus concolor* is related to or identical with *Encymon ruficephalus* Ohta and is being considered in my study of *Encymon*.

In 1925 Arrow treated the genus *Ancylopus* as having but 1 species, which occurred in S. Italy and Sicily and also ranged over sub-Saharan Africa, Ceylon, India, and E. Asia to Japan, Java and New Guinea. He remarked on the great area of distribution and conjectured that feeding habits might be little specialized, quoting Fiori's report that in Calabria the insect was found in decaying vegetable matter in marshy places. Focarile in his 1964 study of *A. melanocephalus* in Italy cited it as "a faithful and recurrent faunistic element of Phragmites marshes", Similar habitat data are frequent on specimens of *Ancylopus* from Garamba Park, Congo.

In 1962 I showed that African material of the genus could be sorted into 7 recognizable forms, probably of specific rank. Series of *Ancylopus* from Italy and Asia also show, on basis of ♂ features, that a number of recognizable populations exist; I have not found adequate characters in ♀♀. Taxonomic rank and relationship of these populations cannot be asserted now with high confidence. Possibly some of the subspecific names could be elevated to specific status.

The "\*" indicates that I have studied the type specimen.

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Genus *Ancylopus* Costa

*Ancylopus* Costa, 1854, *Fauna Regno Napoli, Coleot.* 1: 14. — Grstkr., 1858, *Mon. Endom.*: 188. — Arrow, 1925, *Fauna Br. India, Erotyl.*: 333. — Strkr., 1953, *Gen. Insect.* 210: 74.

Type-species: *Endomychus melanocephalus* Olivier.

Apex of mandible aciculate, without internal tooth. Last article of labial palp slightly transverse, of maxillary palp cylindrical, longer than preceding article. Prosternum linear between procoxae. Mesosternum narrowed behind to 1/2 width of mesocoxa. In ♂ protibia has a large broad tooth, mesotibia may be unarmed or angulately toothed at or beyond mid-length, metatibia with inner edge serrulate or smooth. In ♀ lateral sulci of pronotum turn inward across disc and elytra have a longitudinal groove.

*Ancylopus melanocephalus* (Olivier) Fig. 11.

*Endomychus melanocephalus* Olivier, 1808, *Entom.* 6: 1073, pl. 1, fig. 3.

*Ancylopus melanocephalus*: Costa, 1854, *Fauna Regno Napoli, Coleot.* 1: 14, pl. 8, fig. 3. — Grstkr., 1858, *Mon. Endom.*: 190. — Focarile, 1964, *Bol. Soc. Ent. Ital.* 94: 132, figs. 1-8.

Mesotibia of ♂ with inner margin slightly undulate but without tooth; inner edge of metatibia with minute serrulation. Length 5-6 mm.

Arrow cited the Paris Museum as depot of the type but Descarpentries writes me that no specimen of *melanocephalus* is among the Olivier material now at this museum. Focarile (op. cit.) has discussed the question of whether it is a relict or introduced species and has mapped its distribution in S. Apulia, Calabria and Sicily. Closest resemblance to Italian specimens is shown by *Ancylopus* from Ceylon and S. India.

*Ancylopus ceylonicus* Strohecker Fig. 10, 17.

*Ancylopus ceylonicus* Strkr., 1971, *Ent. Scand. Suppl.* 1(14): 258. Holotype ♂ (LU) from Habarana, Ceylon.

*Ancylopus melanocephalus pictus* (in part): Grstkr., 1858, *Mon. Endom.*: 190.

*Ancylopus melanocephalus* (in part): Arrow, 1925, *Fauna Br. India, Erotyl.*: 334.

Greatest similarity is to the Italian *Ancylopus*, from which it differs in the falcate apex and thinner ramus of edeage, and greater widening of mesotibia in ♂. In both sexes antennae are notably stouter in Ceylon specimens, articles 4-8 almost as wide at apex as long.

Focarile regards the Italian deme as relict but the genus is unknown from other Mediterranean areas. Conjecture may be advanced that the insect was introduced into southern Italy as early as Roman times in the extensive commerce between the empire and southern India. Such speculation allows ample time for the divergence now apparent.

British Museum has specimens of *ceylonicus* from S. India: Bijadaun, Madhya Pradesh; Pondicherry, and ♀♀ from Nilgiri Hills and N. Malabar are probably of this form.

***Ancylopus pictus pictus* (Wiedemann) Fig. 5.**

*Eumorphus pictus* Wied., 1823, *Zool. Mag.* 2: 78.

*Ancylopus melanocephalus pictus* Grstkr., 1858, *Mon. Endom.*: 190.

Very much like type-species but black areas of elytra tend to enlargement and fusion with black line of suture. Inner edge of ♂ mesotibia with broadly angulate tooth near mid-length, inner edge of metatibia finely serrate. Length 6 mm.

Monotype ♀ from Java I have been unable to find. A small series from various localities in Java is in LM. Java: (BMNH); Pekalongan, sugar cane, F. Muir; Larat (*Dendrobium*), Muir (BISHOP). Borneo: Simunjon R., Xantus. Sarawak: Matang, Xantus (MNM). Celebes: Pangie, C. Ribbe (HUM); Makasser, Muir (BISHOP).

***Ancylopus pictus plicatus* Pic, new status Fig. 4.**

*Ancylopus plicatus* Pic, 1930, *Mél. Exot.-Ent.* 56: 10. Monotype ♀ (Pic, PM) from Sumatra.

Elytra black, each with 2 quadrate orange spots. Length 6 mm.

Pic's description cites little beyond color pattern and generic feature of ♀ elytron. Mesotibia of ♂ with angulate tooth near distal 1/3, inner edge of metatibia finely serrate. The specimens from Alas Vallei are very small, 4-5 mm. A single ♂ from Nias I. (BMNH) has "normal" color pattern.

SUMATRA: Alas Vallei, IX, K. Benner (Bogor, Strkr.); Nias I. (BMNH).

***Ancylopus pictus philippinicus* Strohecker, new subspecies Fig. 12.**

The unique ♂ at hand has "normal" color pattern, mesotibia with angulate tooth near distal 1/3, metatibia finely serrate, the minute teeth widely spaced. Length 5.2 mm.

Monotype ♂ (BISHOP 9798), PHILIPPINES: Mindanao: Milbuk, 800 m, Zamboanga del Sur, 10.VIII.1958, H. E. Milliron.

***Ancylopus pictus papuanus* Strohecker, new subspecies Fig. 6.**

In external features very similar to nominate form but mesotibial tooth of ♂ stronger, metatibia with inner edge somewhat expanded and serrate. Length 5.7-6.2 mm.

Some specimens have elytra mostly black, the pale areas reduced to 2 triangular spots on each elytron.

Holotype ♂ (BISHOP 9799), SE NEW GUINEA: Kapagere nr. Rigo, 14-19.V.1959, C. D. Michener; Papua (MNM); Kiunga, Fly R., VII, W. W. Brandt; Bisianumu, IX, Gressitt; Brown R., V, E. J. Ford; Laloki R., Centr. Distr., IV, Michener (BISHOP); Oriomo R., II (BISHOP). NE NEW GUINEA: Erima, Biro; Stephansort, Biro; Sattelberg, Biro (MNM). NW NEW GUINEA: Vogelkop, Kebar Val., I, S. Quate (BISHOP). SW NEW GUINEA: Key I. (HUM). MOLUCCAS: Ambon, Biro (MNM); Batjan: Wajaua, A. Wegner (Bogor, Strkr.); Jilolo, Wallace (BMNH).

**Ancylopus pictus asiaticus** Strohecker, new subspecies      Fig. 1, 2, 15.

Of average smaller size than the preceding forms. Length 4.5-5 mm. Color pattern as shown in fig. 18. Mesotibia of ♂ with angulate tooth distal to mid-length, metatibia with inner edge finely serrate. Some differences in apex of edeage have been noted but not correlated with distribution; recognition of additional races does not seem necessary.

Holotype ♂ (Strkr.), CHINA: Fukien, Shaowu City, II, 1948, J. Fu; Fukien: Yungan City, XI, T. C. Maa (BISHOP); Szechuan: Wanhsien, X, Gressitt & Djou (CAS); Kiangsi: T'en-gan, G. Hauser (HUM). Hangchow, VI (ANSP); Nanking, IV, E. C. Van Dyke (CAS). TAIWAN: Mt Hoozan, H. Sauter (HUM; MNM). TONKIN: Hoa-binh, A. de Coomans (BMNH). JAPAN: Tokyo; Nagasaki, Xantus (MNM); Kobe, I, J. E. Lewis (ANSP); II, J. C. Thomson (CAS); Tokyo, V, Gressitt; Mt Takao, V, Gressitt; Lake Biwa; Kyoto; Mt Ogama, VII, Van Dyke (CAS); Kagoshima; Hakone, IV, Koebele (CAS).

**Ancylopus pictus indianus** Strohecker, new subspecies      Fig. 3.

*Ancylopus melanocephalus* (in part): Arrow, 1925, Fauna Br. India, Erotyl.: 334. — Strkr., 1971, Ent. Scand. Suppl. 1 (14): 258.

Similar in appearance to *A. pictus asiaticus*, but larger. Length 5.2-6 mm. Distinctive features are shown by ♂: apical blade of edeage longer and less reflexed than in *asiaticus*, mesotibial tooth larger and sharper, inner edge of metatibia undulate and sharply serrulate.

Holotype ♂ (BMNH), INDIA: W. Almora, Kumaon, H. G. Champion. Paratypes: 26 ♂♂, 7 ♀♀ with same data as holotype (BMNH, Strkr.; BISHOP); India bor. (BMNH); Assam: Kaziranga, N. Mikir Hills, G. Scherer (MGF). A ♀ from Nuristan Distr., Afghan. (MNM) is probably of this form.

My 1971 reference to Assam and Kumaon material as representative of *A. melanocephalus* was due to comparison with some old specimens labeled "Italia" which, I am now sure, are mislabeled.

**Ancylopus phungi phungi** Pic      Fig. 7, 8, 16.

\**Ancylopus phungi* Pic, 1926, *Mél. Exot.-Ent.* 45: 10; 1929, *Rev. Sci. Bourbon.*: 33. — Arrow, 1928, *Faune Colon. Franc.* 2: 352. Lectotype ♂, allotype ♀ (Pic, PM) from Tonkin.

Although Arrow treated *phungi* as a synonym my study of the Pic types shows the name applicable to a species which occurs over much of eastern Asia. Elytra, as noted by Pic, are shorter than in other species of the genus, black, each with 2 large orange spots which are often connected by a thin pale line. In ♂ mesotibial tooth is at mid-length, metatibia gradually widened to apex, not serrulate. I broke the lateral ramus of aedeagus of lectotype in dissection, but other specimens show ramus is slender. Length 4-5 mm.

CHINA: Foochow (BMNH); Shaowu City, Fukien (Strkr.); Tung-lu, IV, Mrs D. Wright (CAS); Hangchow, VI-X, E. Svenson (ANSP); T'en gan, Kiangsi, G. Hauser (HUM); Tibet (BMNH). JAPAN: Fuji Nat. Pk., 840 m, L. Kawaguchi (ANSP); E. Svenson (UZM).

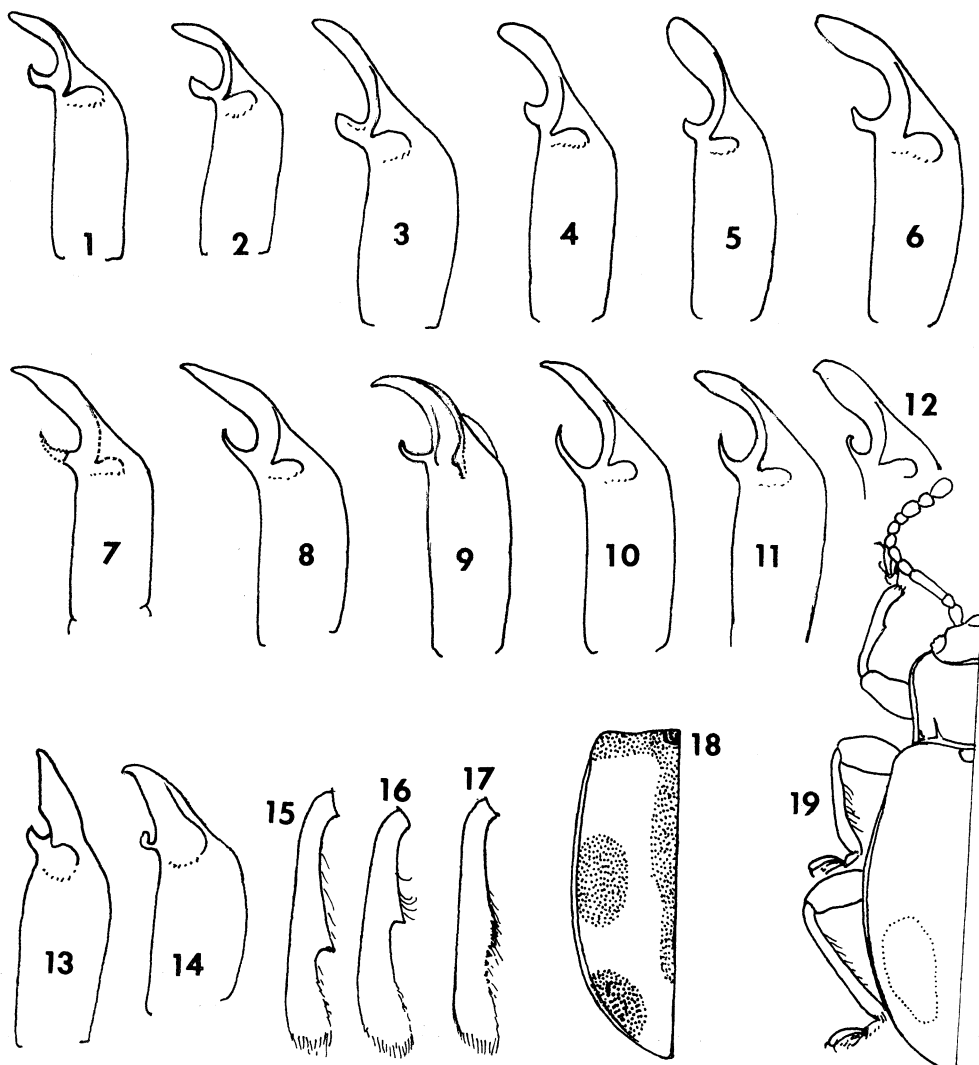


Fig. 1-19. Fig. 1-14 show aedeagus in dorsal view; 1, *Ancylopus pictus asiaticus* Strkr., n. subsp.—Fukien; 2, *A. p. asiaticus* Strkr.—Japan; 3, *A. pictus indianus* Strkr., n. subsp.—Almora, India; 4, *A. pictus plicatus* Pic—Alas Valley, Sumatra; 5, *A. p. pictus* (Wied.)—Java; 6, *A. pictus papuanus* Strkr., n. subsp.—Papua: Kiunga, Fly R.; 7, *A. phungi phungi* Pic—lectotype; 8, *A. ph. phungi* Pic—Fukien; 9, *A. ph. borealior* Strkr., n. subsp.—Nanking, China; 10, *A. ceylonicus* Strkr.; 11, *A. melanocephalus* (Oliv.)—Calabria; 12, *A. pictus philippinicus* Strkr., n. subsp.—Milbuk, Mindanao; 13, *A. madecassus* Strkr.—Mandritsara, Madagascar; 14, *A. glaberrimus* Strkr., n. sp.—holotype; 15, *A. pictus asiaticus* Strkr., n. subsp., mesotibia of ♂; 16, *A. ph. phungi* Pic, mesotibia of ♂; 17, *A. ceylonicus* Strkr., mesotibia of ♂; 18, “typical” elytral pattern of *Ancylopus*; 19, *A. glaberrimus* Strkr., n. sp., ♂.

**Ancylopus phungi borealior** Strohecker, new subspecies      Fig. 9.

Form short and broad as in nominate subspecies. Color ferruginous with antennae, head, distal 1/2 of femora and some elytral markings black. Tibiae reddish. Length 4.9-5 mm. Elytron marked somewhat as in fig. 18 but black at base is limited to umbo, sutural line is very narrow, middle and distal spots smaller than in diagram. In ♂ protibial tooth is much smaller and slenderer than in other forms of genus, mesotibia unarmed, metatibia gradually widened distad, not serrulate.

The name *borealior* may deserve specific status.

Holotype ♂ (CAS), CHINA: Nanking, 31.III.1923, E. C. Van Dyke. 17 other ♂♂ taken at Nanking by Van Dyke in III-IV, with 2 ♂♂ of *A. pictus asiaticus*. 26 ♀♀ of this lot have not been sorted.

**Ancylopus madecassus** Strohecker, new status      Fig. 13.

*Ancylopus melanocephalus madecassus* Strkr., 1955, *Nat. Malgache* 7: 154.

The affinities of this insect are with the African representatives of the genus but it cannot be closely associated with any of them.

Holotype ♂ and allotype ♀ (PM), MADAGASCAR: Mandritsara, III, Michel.

**Ancylopus glaberrimus** Strohecker, new species      Fig. 14, 19.

Form and size of *A. melanocephalus*, black with head, prothorax and large pre-apical elytral spot orange-red. Length 5.8-6 mm.

Sides of pronotum more sinuate basad than in type-species, lateral sulci (♂) shorter, shallower, more oblique, elytra more gradually narrowed behind. Pronotum of ♂ brilliant, of ♀ duller and with M-shaped sulcus across disc in addition to usual lateral and basal sulci. Elytra of both sexes brilliant, those of ♀ with shallow longitudinal groove. Protibia of ♂ with small blunt tooth at middle of medial edge, incurved distad; mesotibia bowed inward; metatibia straight, its medial edge fringed but not serrate.

Holotype ♂ (BISHOP 9800), NW NEW GUINEA: Waris, S. Hollandia, 450-500 m, VIII-24-31-1959, T. C. Maa. Allotype ♀ (BISHOP), from same locus, 1-7.VIII.1959, Maa. Paratypes: ♂, same locus, 27-30.VII. 1959, Maa (Strkr.); 2 ♀♀ Genjan, 40 km W. Hollandia, 1-10.III.1960, sweeping, Maa (BISHOP, Strkr.).

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