

Study of Asian Strongyliini (Coleoptera, Tenebrionidae)

III. New *Strongylium* Species from Southern India, Preserved in the Collections of the Muséum National d'Histoire Naturelle, Paris and the Natural History Museum, London

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Abstract This is the third part of a study of the Asian Strongyliini. Sixteen new species of the genus *Strongylium* from southern India are described as follows: *S. agumbeghatense* sp. nov., *S. kadamparaense* sp. nov., *S. poonmudiense* sp. nov., *S. chembraense* sp. nov., *S. nathani* sp. nov., *S. mysorensis* sp. nov., *S. nilgiriensis* sp. nov., *S. mercaraense* sp. nov., *S. anamalaense* sp. nov., *S. malabarensis* sp. nov., *S. shimogaense* sp. nov., *S. cinchonaense* sp. nov., *S. keralaense* sp. nov., *S. pallavum* sp. nov., *S. elongatissimum* sp. nov. and *S. ferreri* sp. nov.

This paper is the third part of my study of the Asian Strongyliini and contains descriptions of sixteen new species of the genus *Strongylium* from southern India. The specimens examined for this study became available through the courtesy of the curators of the Muséum National d'Histoire Naturelle, Paris, and the Natural History Museum, London, in the early spring of 1996. I have spent a year for studying a great number of unnamed materials from various areas. I am going to describe new species first from southern India, because only a small number of species of this genus have hitherto been known from there.

I wish to express my heartfelt thanks to Dr. Claude GIRARD and Mlle. Jeanne CHARBONNEL, Muséum National d'Histoire Naturelle, Paris, and Messrs. Martin J. D. BRENDLE and Malcolm KERLEY, the Natural History Museum, London, for their invaluable aid extended to me in the course of the present study. Thanks are also due to Messrs. Kaoru SAKAI and Seiji MORITA in Tokyo for taking photographs inserted in this paper. Finally, I wish to express my deepest appreciation to Dr. Shun-Ichi UENO, National Science Museum (Nat. Hist.), Tokyo, for his constant guidance of my taxonomic studies.

Depositories of the holotypes to be designated are given in the text.

Strongylium agumbeghatense sp. nov.

(Fig. 1)

Darkly castaneous, basal margin of pronotum and elytra more or less lighter in colour, each surface with feeble greenish tinge and almost glabrous. Rather elongate, gently convex.

Head subdecagonal, feebly convex, weakly micro-shagreened, closely, irregularly punctate; clypeus transverse, widely bent downwards in front, fronto-clypeal border widely arcuate and finely sulcate; genae weakly depressed at postero-internal portions before eyes, with outer margins moderately raised and obtusely angulate; frons rather short and wide, mildly inclined forwards; eyes medium-sized, somewhat reniform, rounded laterad, rather obliquely inlaid into head, diatone slightly wider than the width of an eye diameter; vertex with a shallow impunctate impression medially. Antennae somewhat claviform, reaching basal 1/5 of elytra, ratio of the length of each segment from basal to apical: 0.5, 0.2, 1.0, 0.9, 0.65, 0.6, 0.53, 0.45, 0.36, 0.34, 0.6.

Pronotum trapezoidal, 1.33 times as wide as long, widest at basal 1/3; apex almost straight and rimmed, the rim feebly thickened in middle; base feebly sinuous on each side, finely bordered, and rimmed; sides steeply declined to lateral margins, which are feebly produced laterad, indistinctly denticulate at basal 1/3, and finely carinate, the carinae barely visible from above; front angles rounded, hind angles slightly acute; disc gently convex, very weakly, longitudinally depressed in medial portion, with a pair of rounded impressions at basal 1/3, surface of pronotum feebly micro-shagreened, rather closely, irregularly scattered with punctures. Scutellum somewhat linguiform, feebly convex, scattered with microscopic punctures.

Elytra 2.4 times as long as wide, 4.8 times the length and 1.46 times the width of pronotum, feebly widened posteriad, widest at apical 3/8; dorsum rather strongly convex, gently undulate, depressed at basal 2/7 and apical 4/9, highest at basal 2/5; disc weakly micro-shagreened, irregularly punctato-striate, the punctures in lateral portions becoming larger, often fused with one another, and forming longitudinal foveae; intervals gently convex, often transversely ridged and connected with one another, feebly micro-shagreened, and sparsely scattered with microscopic punctures.

Ratios of the lengths of pro-, meso- and metatarsomeres: 0.24, 0.18, 0.2, 0.2, 1.2; 1.65, 0.85, 0.75, 0.4, 1.5; 1.7, 0.7, 0.5, 1.5.

Body length: 11–12 mm.

Holotype: ♀, Devala, Nilgiri Hills, southern India, V-1961, P. S. NATHAN leg. (MNHN). Paratype: 1 ex., Agumbe Ghat, Shimoga Dist., Mysore State, southern India, V-1974, no collector's name.

Notes. This new species somewhat resembles *Strongylium gratum* MÄKLIN, 1864, from the Sunda Islands, but can easily be distinguished from the latter by the smaller eyes, the head and pronotum not rugoso-punctate but closely punctate, and the elytra less coarsely punctato-striate, with apices not projected posteriad.

Strongylium kadamparaiense sp. nov.

(Fig. 2)

A remarkable species with no close relative previously known. Iron-greyish with feeble dark greenish tinge, vertex, disc of pronotum, scutellum and elytra with brassy lustre, fore body above feebly sericeously shining, elytra gently shining, ventral surface rather alutaceous; each surface almost glabrous. Elongate, rather strongly convex.

Head subdecagonal, feebly micro-shagreened, closely punctate; clypeus flattened in basal portion, noticeably projected and rather strongly bent downwards in front, fronto-clypeal border widely arcuate and finely sulcate; genae rather noticeably impressed before eyes, with outer margins strongly raised and rounded; frons finely T-shaped, rather steeply inclined forwards; eyes large, noticeably rounded laterad, obliquely, broadly inlaid into head, diameter about 1/20 times the width of an eye diameter; vertex with a somewhat rhombical impression medially. Antennae somewhat filiform, reaching basal 1/4 of elytra, ratio of the length of each segment from basal to apical: 0.77, 0.2, 1.3, 1.23, 1.0, 0.87, 0.75, 0.67, 0.53, 0.44, 0.52.

Pronotum short barrel-shaped, 1.2 times as wide as long, widest at the middle; apex feebly emarginate and rimmed, the rim remarkably thickened in middle; base feebly sinuous on each side, clearly bordered and ridged; sides somewhat straightly declined to lateral margins, which are gently arcuate and finely carinulate, the carinulae visible from above; front angles rounded, hind angles subrectangular; disc gently convex, longitudinally impressed in the middle, with two pairs of impressions, one slightly before basal 1/3, the other close to base; surface of pronotum feebly micro-shagreened, frequently, irregularly scattered with punctures. Scutellum somewhat linguiform, feebly convex in middle, though longitudinally depressed in postero-medial portion, frequently scattered with microscopic punctures in lateral portions.

Elytra 2.63 times as long as wide, 4.52 times the length and 1.44 times the width of pronotum, feebly constricted at basal 1/3, widest slightly behind the middle; dorsum strongly convex, slightly undulate, depressed at basal 1/5, basal 1/3 and slightly behind the middle, and also irregularly depressed in posterior portion, highest at basal 1/4, area around scutellar striae weakly, longitudinally depressed; disc slightly micro-shagreened and sparsely micro-aciculate, grooved with rows of punctures, the grooves often interrupted by low transverse ridges, the punctures deep and somewhat elongate, those in lateral portions becoming larger, often fused with one another, and forming longitudinal foveae; intervals gently convex, often transversely raised and connected with one another, 7th interval distinctly ridged in apical 1/4.

Male legs rather noticeably slender; mesotibiae weakly curved ventrad in apical 1/3; metatibiae gently curved dorsad; ratios of the lengths of pro-, meso- and metatarsomeres: 0.47, 0.3, 0.33, 0.27, 1.2; 2.39, 1.18, 0.89, 0.47, 1.57; 2.9, 1.23, 0.76, 1.6.

Male genitalia short fusiform, evenly curved in lateral view, 2.8 mm in length, 0.6 mm in width; fused lateral lobes 1.3 mm in length, with acutely pointed apex.

Body length: ca. 18.5 mm.

Holotype: ♂, Kadamparai, Cinchona, 1,200 m alt., Anamala Hills, southern India, V-1974, P. S. NATHAN leg. (MNHNP).

Strongylium poonmudiense sp. nov.

(Fig. 3)

Piceous, head, pronotum and scutellum darker in colour, terminal segments of antennae pale yellow, apical half of head and elytra gently, somewhat sericeously shining, posterior half of head, pronotum, scutellum and ventral surface rather alutaceous; each surface except for antennae and legs, which are finely haired, almost glabrous. Somewhat elongate, rather strongly convex.

Head subrhombical, feebly micro-shagreened; clypeus frequently scattered with small punctures, depressed in basal portion, gently inclined apicad, fronto-clypeal border widely arcuate, very finely sulcate; genae noticeably, obliquely raised, with widely rounded outer margins; frons finely T-shaped and raised, rather steeply inclined forwards; eyes distinctly large, noticeably convex laterad, broadly, obliquely inlaid into head, diatone about 1/10 times the width of an eye diameter; vertex closely rugoso-punctate, each puncture with a short scale-like hair, with a vague, longitudinal impression medially. Antennae reaching basal 3/10 of elytra, with each segment rather oblong and feebly dilated towards apex, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.6, 0.6, 0.55, 0.55, 0.55, 0.55, 0.55, 0.5, 0.6.

Pronotum somewhat barrel-shaped, 1.39 times as wide as long, widest at the middle; apex almost straight and rimmed, the rim feebly thickened in middle; base very feebly bisinuous, bordered and ridged, the ridge rather noticeably thickened in middle; sides steeply inclined, finely and clearly carinulate, the carinulae obtusely angulate at the middle, sinuate in basal 1/3, and visible from above; front angles obtuse, hind angles subrectangular; disc moderately convex, noticeably depressed in medio-basal portion, longitudinally impressed in middle, with two pairs of oblique impressions, one at the middle, and the other near base; surface feebly micro-shagreened, closely, coarsely rugoso-punctate, each puncture with a short scale-like hair in lateral portions. Scutellum triangular with rounded sides, obviously elevated, feebly convex, though longitudinally depressed in middle, micro-shagreened, scattered with microscopic punctures.

Elytra 2.28 times as long as wide, 4.28 times the length and 1.3 times the width of pronotum, very slightly constricted at basal 1/3, feebly widened posteriad, widest at apical 2/5; dorsum rather strongly convex, feebly depressed in basal 1/5 around scutellar striae, highest at basal 1/3; disc punctato-striate, the punctures small and somewhat oblong, 1st and 2nd striae connected with each other and impressed near base, 3rd to 6th striae more or less noticeably impressed near base; intervals distinctly ridged, micro-shagreened, sparsely scattered with microscopic punctures, each with a microscopic bent hair.

Legs rather noticeably haired; ratios of the lengths of pro-, meso- and metatarsomeres: 0.3, 0.18, 0.21, 0.22, 1.2; 1.75, 0.75, 0.65, 0.38, 1.35; 1.8, 0.65, 0.4, 1.22.

Male genitalia short subfusiform, very weakly curved in lateral view, 2.2 mm in length and 0.26 mm in width; fused lateral lobes 1.0 mm in length with nib-shaped apex.

Body length: 8.7 mm.

Holotype: ♂, Poonmudi Range, Trivandrum Dist., Kerala State, southern India, V-1972, R. S. NATHAN leg. (MNHNP).

Notes. This new species is a member of the species-group of *Strongylium fujitai* MASUMOTO, 1981, from Taiwan, but can be distinguished from the other species of the group by the noticeably ridged elytral intervals.

Strongylium chembraense sp. nov.

(Fig. 4)

This new species somewhat resembles the preceding new one, *S. poonmudiense* sp. nov., but can be distinguished from the latter by the following characteristics:

Body larger (12.7 mm) and robuster. Head piceous, pronotum dark castaneous, apical and basal margins of pronotum with reddish tinge, elytra and legs castaneous; head and pronotum feebly shining, elytra gently, somewhat vitreously shining, ventral surface rather alutaceous; each surface except for tarsi and inner faces of tibiae, which are finely haired, almost glabrous.

Head feebly micro-shagreened; clypeus broader, semicircular, more frequently scattered with small punctures, gently inclined apicad, fronto-clypeal border arcuate, more clearly sulcate; genae more noticeably, obliquely raised, with outer margins rather obtusely angulate; frons boldly T-shaped, raised medially, less steeply inclined forwards, gently depressed on each side before eyes; eyes not large, somewhat reniform, convex laterad, obliquely inlaid into head, diatone slightly less than 1/3 times the width of an eye diameter; vertex with a vague longitudinal impression medially, rather closely punctate, the punctures often irregularly fused with one another. Antennae with 5 apical segments lost in the type material, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.65, 0.77, 0.6, 0.5, —, —, —, —, —.

Pronotum somewhat barrel-shaped, 1.33 times as wide as long, widest at apical 2/5, almost straightly narrowed towards base and roundly so towards apex; apex almost straight and somewhat roughly rimmed, the rim feebly thickened in middle; base very feebly bisinuous, finely bordered, and rimmed; sides steeply inclined, clearly carinulate, the carinulae more obtusely angulate at apical 2/5, and visible from above; front angles rounded, hind angles more obtuse; disc moderately convex, depressed in medio-basal portion, longitudinally impressed in the middle, and with a pair of oblique impressions close to base, less noticeably micro-shagreened, less coarsely punctate, the punctures sometimes fused with one another, each with a less noticeable, short, scale-like hair. Scutellum triangular, neither elevated nor convex though slightly longitudinally depressed in middle, micro-shagreened, more noticeably scattered with microscopic punctures.

Elytra 2.1 times as long as wide, 4.1 times the length and 1.44 times the width of pronotum, gently widened posteriad, widest at apical 2/5; dorsum rather strongly convex, feebly depressed in basal 1/4 around scutellar striae, highest at basal 2/5; disc punctato-striate, the punctures comparatively large and clearer than those in *S. poonmudiense*, 1st and 2nd striae connected with each other near base and weakly impressed, 3rd to 6th striae impressed near base; intervals not ridged but gently convex, less noticeably micro-shagreened, more frequently scattered with microscopic punctures, each with a microscopic bent hair.

Legs less noticeably haired; ratios of the lengths of pro-, meso- and metatarsomeres: 0.25, 0.16, 0.17, 0.23, 1.2; 1.15, 0.57, 0.38, 0.35, 1.27; 1.28, 0.55, 0.38, 1.28.

Holotype: ♀, Chembra Peak Area, Calicut Dist., Kerala State, southern India, IV-1970, no collector's name (MNHNP).

Strongylium nathani sp. nov.

(Fig. 5)

Blackish brown, mouth parts, genae, 3 basal segments and terminal segments of antennae, anterior portion of pronotum, medial and postero-lateral portions of elytra, legs, etc., fairly distinctly lighter in colour, head and pronotum feebly, sericeously shining, elytra moderately, somewhat vitreously shining, ventral surface rather alutaceous; each surface except for legs, which are finely haired, almost glabrous. Rather elongate, moderately convex.

Head subdecagonal, closely, finely punctate, the punctures becoming finer, closer and forming rugosities in posterior portion; clypeus depressed in basal portion, noticeably convex in middle, gently inclined apicad, fronto-clypeal border almost straight, very finely sulcate; genae noticeably, obliquely raised, with obtuse outer margins; frons finely T-shaped and ridged, gently inclined forwards; eyes large, noticeably convex laterad, broadly inlaid into head, feebly grooved along postero-internal margins, diatone about 1/10 times the width of an eye diameter; vertex with a vague longitudinal impression medially. Antennae feebly thickened to apices, reaching humeri, ratio of the length of each segment from basal to apical: 0.4, 0.2, 0.6, 0.5, 0.4, 0.38, 0.38, 0.4, 0.35, 0.35, 0.6.

Pronotum somewhat trapezoidal, 1.37 times as wide as long, widest at the middle; apex almost straight, finely rimmed; base very feebly bisinuous, bordered and ridged; sides rather steeply inclined, carinulate, the carinulae denticulate at the middle, and visible from above; front angles obtuse, hind angles subrectangular; disc moderately convex, closely, coarsely rugoso-punctate, depressed in medio-basal portion, longitudinally impressed at the middle, with a pair of vague oblique impressions close to base. Scutellum somewhat pentagonal, slightly concave in middle, very feebly micro-shagreened, sparsely scattered with microscopic punctures.

Elytra 2.17 times as long as wide, 3.85 times the length and 1.4 times the width of pronotum, slightly constricted at basal 3/8, feebly widened posteriad, widest at apical

3/8; dorsum rather strongly convex, very feebly depressed longitudinally in middle, highest at basal 1/4; disc grooved with rows of punctures, which are somewhat oblong, each puncture with a small granule at upper edge on each side, 1st and 2nd grooves connected with each other and impressed near base, 3rd to 5th grooves more or less noticeably impressed near base; intervals rather distinctly ridged, anterior portions of 3rd to 6th noticeably so, feebly micro-shagreened, sparsely scattered with microscopic punctures, each with a microscopic bent hair.

Legs without peculiarities; ratios of the lengths of pro-, meso- and metatarsomeres: 0.3, 0.18, 0.2, 0.25, 1.2; 1.15, 0.65, 0.35, 0.35, 1.23; 1.25, 0.4, 0.35, 1.25.

Body length: 9.5–10 mm.

Holotype: ♀, Cinchona, 1,200 m, Anamala Hills, southern India, V-1957, P. S. NATHAN leg. (MNHN). Paratypes: 7 exs., same data as for the holotype.

Notes. This is an isolated new species recognized at first glance on its dorsal coloration. Each upper edge of elytral punctures is provided with a pair of granules. It is an important character of the members of the species-group of *Strongylium cultellatum* MÄKLIN, 1864.

Strongylium mysorensis sp. nov.

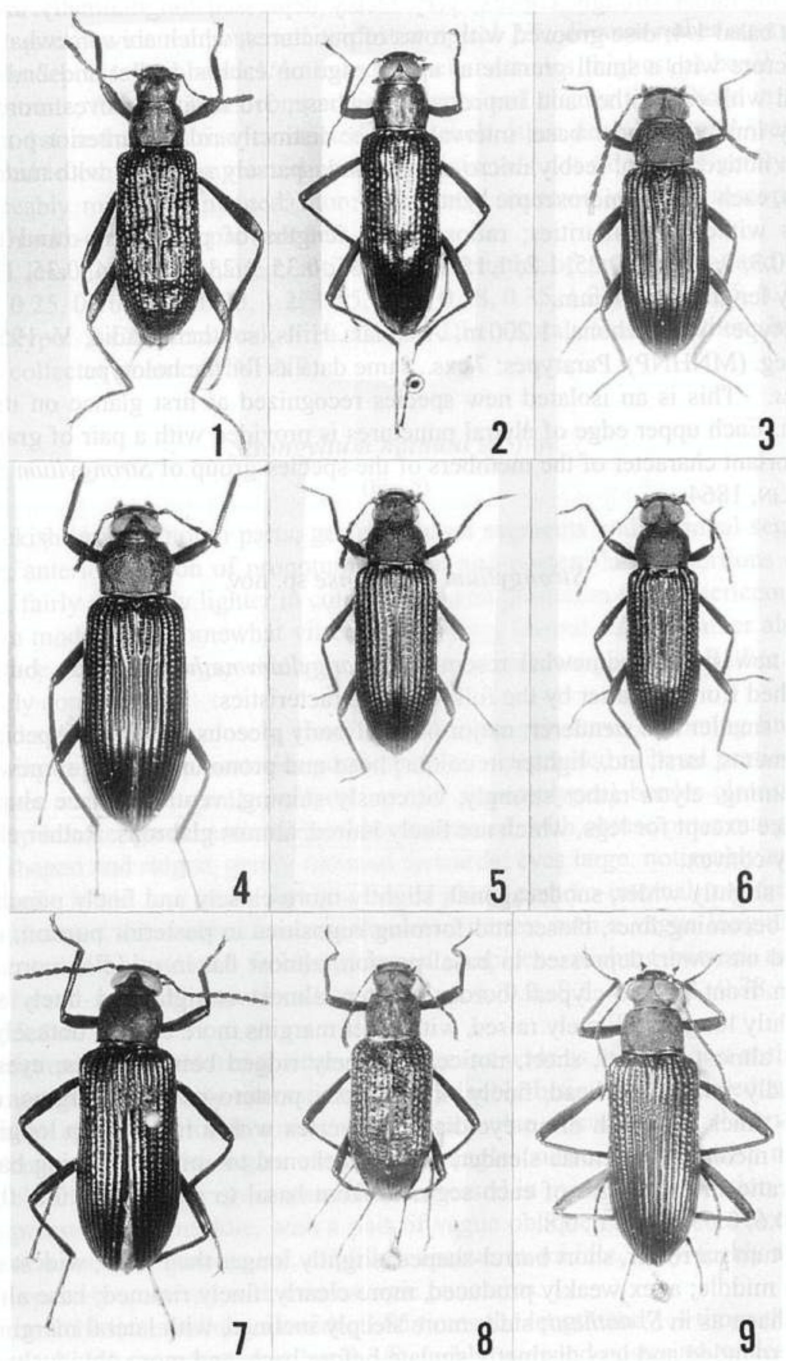
(Fig. 6)

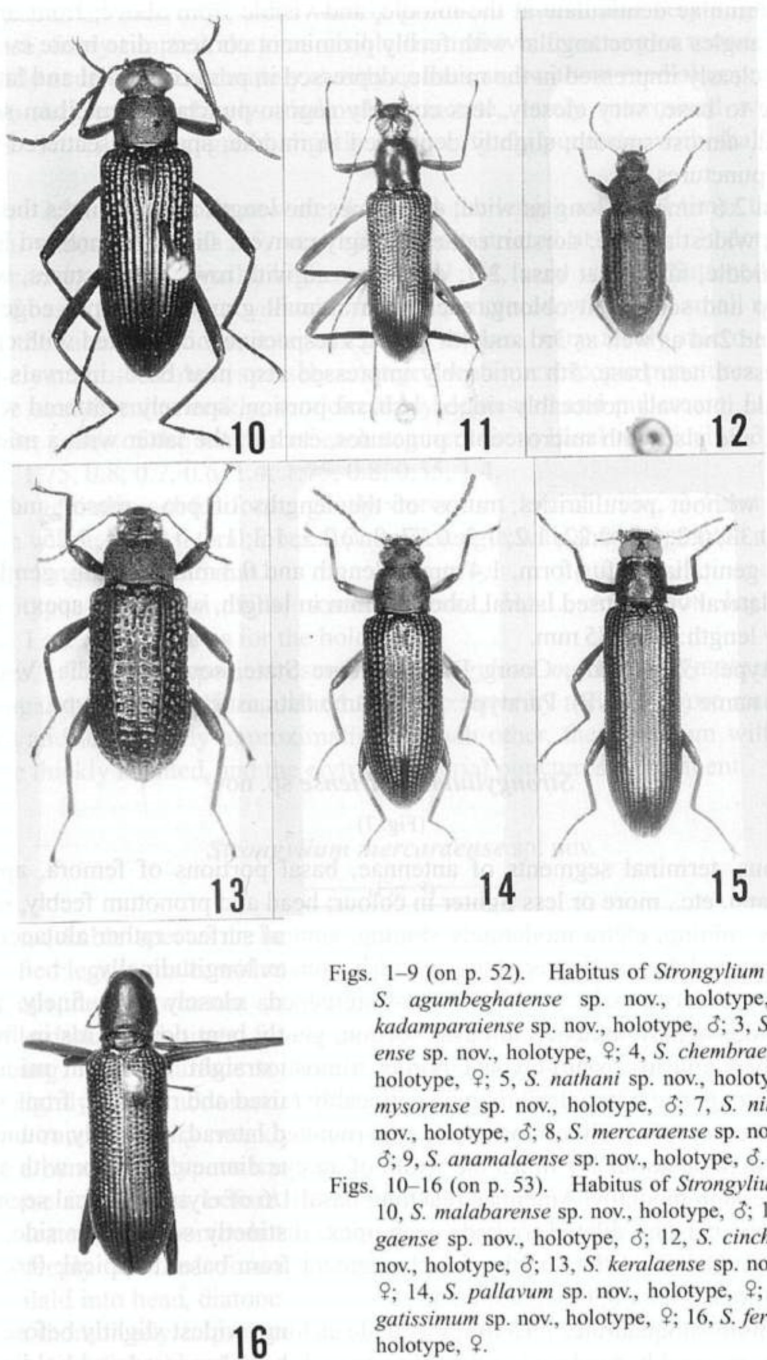
This new species somewhat resembles *Strongylium nathani* sp. nov., but can be distinguished from the latter by the following characteristics:

Body smaller and slenderer; major parts of body piceous, antennae especially terminal segments, tarsi, etc., lighter in colour; head and pronotum feebly, somewhat vitreously shining, elytra rather strongly, vitreously shining, ventral surface alutaceous; each surface except for legs, which are finely haired, almost glabrous. Rather elongate, moderately convex.

Head slightly wider, subdecagonal, slightly more closely and finely punctate, the punctures becoming finer, closer and forming rugosities in posterior portion; clypeus shorter and narrower, depressed in basal portion, almost flat in middle, more steeply inclined in front, fronto-clypeal border shorter, almost straight and finely sulcate; genae slightly longer, obliquely raised, with outer margins more clearly, obtusely angulate; frons almost vertical, short, noticeably, finely ridged between eyes; eyes large, more roundly inlaid into head, finely ridged along postero-internal margins, diatone about 1/15 times the width of an eye diameter; vertex with a rather deep longitudinal impression medially. Antennae slender, feebly thickened to apices, reaching basal 1/4 of elytra, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.8, 0.7, 0.65, 0.6, 0.6, 0.65, 0.6, 0.6, 0.8.

Pronotum narrower, short barrel-shaped, slightly longer than wide, widest slightly behind the middle; apex weakly produced, more clearly, finely rimmed; base almost of the same shape as in *S. nathani*; sides more steeply inclined, with lateral margins more noticeably rounded and less distinctly sinuate before base, and more obviously carinu-





Figs. 1-9 (on p. 52). Habitus of *Strongylium* spp.—1, *S. agumbeghatense* sp. nov., holotype, ♀; 2, *S. kadamparaiense* sp. nov., holotype, ♂; 3, *S. poonmudiense* sp. nov., holotype, ♀; 4, *S. chembraense* sp. nov., holotype, ♀; 5, *S. nathani* sp. nov., holotype, ♀; 6, *S. mysorensis* sp. nov., holotype, ♂; 7, *S. nilgiriense* sp. nov., holotype, ♂; 8, *S. mercaraense* sp. nov., holotype, ♂; 9, *S. anamalaense* sp. nov., holotype, ♂.

Figs. 10-16 (on p. 53). Habitus of *Strongylium* spp.—10, *S. malabarensis* sp. nov., holotype, ♂; 11, *S. shimogaense* sp. nov., holotype, ♂; 12, *S. cinchonaense* sp. nov., holotype, ♂; 13, *S. keralaense* sp. nov., holotype, ♀; 14, *S. pallavum* sp. nov., holotype, ♀; 15, *S. elongatissimum* sp. nov., holotype, ♀; 16, *S. ferreri* sp. nov., holotype, ♀.

late, the carinulae denticulate at the middle, and visible from above; front angles obtuse, hind angles subrectangular with feebly prominent corners; disc more evenly convex, more clearly impressed in the middle, depressed in postero-medial and lateral portions close to base, very closely, less coarsely rugoso-punctate. Scutellum somewhat pentagonal, almost smooth, slightly depressed in middle, sparsely scattered with microscopic punctures.

Elytra 2.6 times as long as wide, 4.24 times the length and 1.2 times the width of pronotum, widest at base; dorsum rather strongly convex, slightly depressed longitudinally in middle, highest at basal 2/7; disc grooved with rows of punctures, which are large, deep and somewhat oblong, each with a small granule at upper edge on each side, 1st and 2nd as well as 3rd and 4th grooves respectively connected with each other and impressed near base, 5th noticeably impressed also near base; intervals polished, convex, odd intervals noticeably ridged in basal portion, sparsely scattered with small punctures, and also with microscopic punctures, each of the latter with a microscopic bent hair.

Legs without peculiarities; ratios of the lengths of pro-, meso- and metatarsomeres: 0.33, 0.2, 0.2, 0.22, 1.2; 1.2, 0.77, 0.7, 0.5, 1.3; 1.4, 0.6, 0.4, 1.25.

Male genitalia subfusiform, 1.4 mm in length and 0.3 mm in width, gently, evenly curved in lateral view; fused lateral lobes 0.6 mm in length, with acute apex.

Body length: ca. 7.75 mm.

Holotype: ♂, Mercara, Coorg Dist., Mysore State, southern India, V-1973, no collector's name (MNHNP). Paratype: 1 ex., same data as for the holotype.

Strongylium nilgiriense sp. nov.

(Fig. 7)

Piceous, terminal segments of antennae, basal portions of femora, apical segments of tarsi, etc., more or less lighter in colour; head and pronotum feebly, somewhat sericeously shining, elytra moderately shining, ventral surface rather alutaceous; each surface almost glabrous. Rather elongate, fairly convex longitudinally.

Head subdecagonal, weakly micro-shagreened, closely and finely punctate; clypeus wide, weakly flattened in basal portion, gently bent downwards in front, subparallel-sided apicad, fronto-clypeal border almost straight widely in middle, very finely sulcate; genae with outer margins noticeably raised and rounded; frons widely T-shaped, rather steeply inclined forwards; eyes rounded laterad, obliquely, roundly inlaid into head, diameter about 1/7 times the width of an eye diameter; vertex with a longitudinal impression medially. Antennae reaching basal 1/6 of elytra, 8 apical segments except for terminal one dilated towards each apex, distinctly so in inner side, terminal segment ovate, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.8, 0.75, 0.6, 0.6, 0.55, 0.55, 0.55, 0.5, 0.55.

Pronotum subquadrate, 1.15 times as wide as long, widest slightly before the middle; apex very weakly produced and finely rimmed; base bordered and boldly rimmed,

feebly sinuous on each side; sides weakly produced laterad and very slightly sinuate before base, finely rimmed, the rims visible from above; front angles rounded, hind angles slightly acute; disc moderately, evenly convex and without medial impression, feebly micro-shagreened, closely, shallowly punctate, rarely intermixed with smaller punctures. Scutellum triangular, slightly convex, finely punctate, with shallow medial line.

Elytra 2.3 times as long as wide, 4.2 times the length and 1.54 times the width of pronotum, widest at apical $2/5$, very slightly constricted at basal $1/3$; dorsum rather strongly convex longitudinally, highest at basal $1/4$, very weakly flattened in medial portion of basal $1/5$; disc grooved with rows of punctures, which are small and become larger in the lateral portions; intervals gently convex, very feebly micro-shagreened, transversely micro-aciculate, sparsely scattered with microscopic punctures.

Male anal sternite weakly, semicircularly depressed and pubescent. Legs slender and simple; ratios of the lengths of each segment from basal to apical: 0.35, 0.2, 0.2, 0.25, 1.2; 1.75, 0.8, 0.7, 0.6, 1.4; 1.75, 0.8, 0.55, 1.4.

Male genitalia subfusiform, gently curved in lateral view, 3.4 mm in length, 0.6 mm in width; fused lateral lobes 1.6 mm in length with sharply pointed apex.

Body length: 19–20.5 mm.

Holotype: ♂, Nilgiri Hills, southern India, H. L. ANDERSON leg. (NHML). Paratype: 1 ex., same data as for the holotype.

Notes. This new species resembles *Strongylium macrops* (WIEDEMANN, 1823) from Bengal, but can be distinguished from the latter by the eyes more roundly inlaid into head and less closely approximating to each other, the pronotum with apex and base more thickly rimmed, and the elytra with striae punctures inconfluent.

Strongylium mercaraense sp. nov.

(Fig. 8)

A remarkable species in having coarsely punctate and distinctly undulate elytra and modified legs in male, with no close relatives previously known.

Piceous, head, pronotum and scutellum with feeble ironish or brassy tinge, elytra with feeble dark bluish tinge; fore body above slightly sericeous, elytra feebly metallically shining, ventral surface somewhat alutaceous; each surface almost glabrous except for slightly haired abdomen. Oblong-ovate and rather strongly convex.

Head rounded, very weakly micro-shagreened, closely punctate, each puncture with a fine bent hair; clypeus transverse, rather strongly bent downwards in front, with a transverse impression before fronto-clypeal border, which is nearly straight and clearly sulcate; genae somewhat rhombical, strongly, obliquely raised; frons finely T-shaped, steeply inclined forwards; eyes subreniform, rounded laterad, obliquely, roundly inlaid into head, diameter about $1/10$ times the width of an eye diameter; vertex somewhat rhombically impressed in middle. Antennae subclavate, reaching basal $1/9$ of elytra, ratio of the length of each segment from basal to apical: 0.43, 0.2, 1.1, 0.8,

0.7, 0.7, 0.65, 0.5, 0.45, 0.37, 0.4.

Pronotum subquadrate, 1.25 times as wide as long, widest at apical 2/5; apex almost straight, bordered and rimmed, the rim thickened in middle; base bordered and ridged, feebly sinuous on each side; sides gently declined to lateral margins, which are feebly angulate and finely rimmed, the rims easily visible from above; front angles rounded, hind angles rectangular; disc moderately convex, distinctly grooved in antero-medial portion, very weakly micro-shagreened, closely and coarsely punctate, the punctures often fused with one another, a pair of obsolete gibbosities present slightly behind the middle, their lateral portions being vaguely impressed. Scutellum linguiform, weakly micro-shagreened, scattered with small punctures, each with a fine bent hair.

Elytra somewhat cuneiform, 2.1 times as long as wide, 3.9 times the length and 1.53 times the width of pronotum; dorsum rather strongly convex, quadri-undulate, with a pair of gibbosities at basal 1/9, which are the highest parts; disc feebly micro-shagreened, scattered with microscopic punctures and feebly micro-aciculate, with rows of punctures, those of scutellar striae and 1st rows small and rounded, those of 2nd and another external rows becoming larger and coarser, often forming slightly longitudinal foveae; two or three inner intervals almost flat in anterior portion, lateral ones ridged and often sinuous in anterior portion, posterior portions flat and weakly elevated.

Male anal sternite distinctly emarginate at apex; male protibiae noticeably bent at apical 2/5, with ventral faces gouged in apical 1/3; male mesotibiae slender and weakly curved; male metatibiae with inner faces distinctly gouged, widened in basal 1/3, twisted at basal 1/3; ratios of the lengths of pro-, meso- and metatarsomeres: 0.24, 0.19, 0.21, 0.22, 1.2; 2.11, 0.89, 0.75, 0.48, 1.36; 1.88, 0.66, 0.47, 1.36.

Male genitalia fusiform, gently curved in lateral view, 3.4 mm in length, 0.6 mm in width; lateral lobes acutely pointed, 1.3 mm in length.

Body length: 15–16 mm.

Holotype: ♂, Mercara, Coorg Dist., Mysore State, southern India, V-1973, no collector's name (MNHNP). Paratypes: 1 ex., Cinchona, Anamala Hills, V-1966, P. S. NATHAN leg.; 1 ex., Poonmudi Range, Trivandrum Dist., Kerala State, V-1971, R. S. NATHAN leg.

Strongylium anamalaense sp. nov.

(Fig. 9)

Dark reddish brown, elytra, basal portions of femora, tibiae, etc., more or less lighter in colour; head and pronotum except for apical and basal margins, and elytra moderately shining, ventral surface rather alutaceous; each surface almost glabrous. Rather elongate, fairly convex longitudinally.

Head transversely elliptical, weakly micro-shagreened, closely and finely punctate; clypeus rather broadly flattened in basal portion, strongly bent downwards in

front, feebly divergent apicad, fronto-clypeal border widely arcuate and finely sulcate; genae strongly raised, with rounded outer margins; frons finely T-shaped, rather steeply inclined forwards; eyes large, strongly convex laterad, obliquely inlaid into head, diameter about 1/17 times the width of an eye diameter; vertex medially with a shallow, longitudinal impression. Antennae reaching basal 1/5 of elytra, with each segment oblong and widened at each apex, ratio of the length of each segment from basal to apical: 0.55, 0.2, 1.02, 0.72, 0.68, 0.68, 0.65, 0.63, 0.62, 0.62, 0.72.

Pronotum somewhat trapezoidal, 1.33 times as wide as long, widest at base; apex very weakly produced and finely rimmed; base bordered and boldly rimmed, sinuous on each side; sides feebly produced laterad and very slightly sinuate before base, finely rimmed, the rims invisible from above; front angles rounded, hind angles slightly acute; disc moderately convex, gently depressed in medio-basal portion, weakly microshagreened, closely and coarsely punctate, with a pair of oblique impressions close to base. Scutellum triangular, slightly convex, finely punctato-aciculate.

Elytra 2.8 times as long as wide, 5.4 times the length and 1.4 times the width of pronotum, widest at base, gradually narrowed apicad, very slightly constricted at basal 1/3; dorsum rather strongly convex longitudinally, highest at basal 1/5, very weakly flattened and inclined forwards in medial portion of basal 1/6; disc grooved with rows of punctures, which become larger laterad and smaller posteriad; intervals gently convex, very weakly microshagreened, sparsely scattered with microscopic punctures.

Legs slender, without special features; ratios of the lengths of each segment from basal to apical: 0.3, 0.25, 0.25, 0.26, 1.2; 1.36, 0.65, 0.6, 0.57, 1.33; 1.5, 0.63, 0.61, 1.36.

Male genitalia subfusiform, gently curved in lateral view, 3.6 mm in length, 0.6 mm in width; fused lateral lobes about 1.8 mm in length with sharply pointed apex.

Body length: 17–23 mm.

Holotype: ♂, Cinchona, Anamala Hills, southern India, V–1969, P. S. NATHAN leg. (MNHNP). Paratypes: 1 ex., V–1957, 1 ex., V–1965, 1 ex., V–1968, 2 exs., IV–1969, same locality and collector as for the holotype; 5 exs., Poonmudi Range, Trivandrum Dist., Kerale State, V–1972, R. S. NATHAN leg.; 1 ex., Chembra Peak Area, Calicut Dist., Kerale State, IV–1970, no collector's name.

Notes. The nearest named species is *S. aratum* FAIRMAIRE, 1896, from Kanara, southern India, and is characterized by the medium-sized and subcylindrical body, with pronotum closely and finely punctate, and elytra with rows of coarse punctures. The present new one possesses a pronotum closely and coarsely punctate, and elytra moderately grooved with rows of punctures.

Strongylium malabarensis sp. nov.

(Fig. 10)

This new species resembles the preceding new one, *S. anamalaense* sp. nov., but is distinguishable from the latter by the following characteristics:

Body smaller (15.5 mm) and slenderer; coloration and lustre almost the same as those in *S. anamalaense*.

Head slightly more transverse, weakly micro-shagreened, closely and finely punctate; clypeus narrower, fronto-clypeal border very widely arcuate, finely sulcate; genae less strongly raised, with obtuse outer margins; frons finely T-shaped, rather steeply inclined forwards; eyes large, more strongly convex laterad, diatone about 1/15 times the width of an eye diameter; vertex with a shallow longitudinal impression medially. Antennae similar in shape to those of *S. anamalaense*, reaching basal 1/3 of elytra, ratio of the length of each segment from basal to apical: 0.7, 0.2, 0.9, 0.8, 0.65, 0.65, 0.7, 0.7, 0.7, 0.8.

Pronotum narrower, 1.2 times as wide as long, widest at base; apex very weakly produced and finely rimmed, the rim feebly thinned in middle; base bordered and boldly rimmed, the rim more finely, highly raised, less noticeably sinuous on each side; sides somewhat subparallel, though very slightly sinuate before base, finely rimmed, the rims hardly visible from above; front angles rounded, hind angles slightly acute; disc similar to that of *S. anamalaense*, with a pair of oblique impressions close to base. Scutellum more narrowly triangular, slightly convex, scattered with microscopic punctures in lateral portions.

Elytra slenderer, 2.54 times as long as wide, 4.5 times the length and 1.4 times the width of pronotum, widest at apical 2/5, gently constricted at basal 1/3; dorsum rather strongly convex longitudinally, highest at basal 1/5; disc punctato-striate, the punctures obviously smaller, often confluent with one another and forming sections, distinctly so in antero-lateral portions; intervals slightly more noticeably convex and micro-shagreened, more frequently micro-aciculate, sparsely scattered with microscopic punctures.

Legs similar to those of *S. anamalaense*, without special characteristics; ratios of the lengths of each segment from basal to apical: 0.23, 0.1.8, 0.22, 0.22, 1.2; 1.35, 0.65, 0.53, 0.45, 1.33; 1.6, 0.65, 0.6, 1.3.

Male genitalia subfusiform, more noticeably curved in lateral view, 3.2 mm in length, 0.6 mm in width; fused lateral lobes about 1.6 mm in length with feebly prolonged apex.

Holotype: ♂, Karkur Ghat, Malabar, southern India, coll. ANDREWES (NHML).

Strongylium shimogaense sp. nov.

(Fig. 11)

This new species resembles *S. angusticolle* MÄKLIN, 1864, from "India orientali (Sylhet)", but can be distinguished from the latter by the following characteristics:

Body slenderer and subcylindrical; head and pronotum indigo-blue, elytra blue with feeble golden greenish tinge, femora reddish brown, tibiae, tarsi, 4 basal segments of antennae, mouth parts, etc., black, ventral surface greenish blue partly with feeble brassy tinge.

Head narrower, smoother, more finely punctate; clypeus narrower and more distinctly protruded apicad, with a transverse impression just before fronto-clypeal border, which is widely arcuate and clearly sulcate; genae with more angulate outer margins; frons T-shaped, moderately inclined forwards; eyes less strongly convex laterad, somewhat obliquely inlaid into head, diatone comparatively wide, about 1/6 times the width of an eye diameter; vertex with a weaker longitudinally rhombical impression in middle. Antennae longer, filiform, reaching basal 1/4 of elytra; ratio of the length of each segment from basal to apical: 0.6, 0.2, 1.0, 0.8, 0.73, 0.68, 0.62, 0.6, 0.54, 0.51, 0.57.

Pronotum narrower, almost as wide as long; apex and base more finely rimmed; sides more distinctly, widely triangularly produced, steeply declined to lateral margins, which are finely rimmed, the rims almost invisible from above; front angles rounded, hind angles rather acute; disc less strongly swollen in apical 3/4, less closely, more finely punctate. Scutellum equilaterally triangular, very feebly micro-shagreened, sparsely scattered with microscopic punctures.

Elytra obviously slenderer, 2.7 times as long as wide, 3.75 times the length and 1.4 times the width of pronotum, gradually narrowed posteriad, though very slightly constricted at basal 1/3; dorsum evenly convex longitudinally, without swellings or transverse ridges unlike that in *S. angusticolle*, very weakly depressed along scutellar striae; disc in antero-lateral portion with rows of punctures, whose bottoms are small and rounded, and whose upper edges are large and somewhat quadrate, and in posterior portion with punctato-striae, 1st to 4th rows of punctures impressed near base; intervals less strongly, transversely ridged, only gently connected with one another, and somewhat forming a comb-shape.

Male anal sternite parabolically depressed, truncate at apex; male metatibiae simple in shape; ratios of the lengths of pro-, meso- and metatarsomeres: 0.31, 0.24, 0.22, 0.22, 1.2; 2.45, 0.9, 0.7, 0.5, 1.5; 2.87, 1.0, 0.68, 1.52.

Male genitalia 4.5 mm in length and 0.65 mm in width; basal piece somewhat fusiform, 2 mm in length; fused lateral lobes slender, 2.5 mm in length, with acute apex.

Body length: 17–18 mm.

Holotype: ♂, Agumbe Ghat, Shimoga Dist., Mysore State, southern India, V-1974, no collector's name, coll. P. ARDOIN (MNHNP). Paratypes: 1 ex., Mahé, Côte de Malabar, Chass. indigènes, VIII-1901, coll. M. MAINDRON; 2 exs, N. Kanara, T. R. BELL leg., coll. ANDREWES (NHML).

Strongylium cinchonaense sp. nov.

(Fig. 12)

Dark reddish brown, head, pronotum and scutellum, etc., more or less darker in colour, each surface feebly, somewhat sericeously shining and almost glabrous. Oblong, moderately convex.

Head subdecagonal, almost vertical in front, closely rugoso-punctate, each punc-

ture with a microscopic bent hair; clypeus semicircular, gently depressed in basal portion, weakly bent downwards in front, fronto-clypeal border almost straight, indistinctly sulcate; genae gently, obliquely raised, with rounded outer margins; frons rather steeply inclined forwards, weakly depressed before eyes; eyes rather small and subsecuriform, gently convex laterad, obliquely inlaid into head, diatone about 1.3 times the width of an eye diameter; vertex rather distinctly raised, rather steeply inclined laterad behind eyes, with a vague longitudinal impression medially, extending to occiput. Antennae feebly thickened to apices, reaching basal 1/5 of elytra, ratio of the length of each segment from basal to apical: 0.4, 0.2, 0.55, 0.45, 0.37, 0.37, 0.4, 0.4, 0.34, 0.34, 0.45.

Pronotum transversely hexagonal, 1.5 times as wide as long, widest at the middle; apex almost straight, thinly, rather roughly ridged; base very feebly bisinuous, bordered and rather roughly rimmed; sides rather steeply inclined, carinulate, the carinulae denticulate and visible from above; front angles obtuse, hind angles subrectangular; disc moderately convex, longitudinally impressed in middle, with a pair of vague oblique impressions close to base, strongly, very closely rugoso-punctate, each puncture with a short bent hair, borders among punctures finely ridged, the ridges often weakly pointed. Scutellum triangular with rounded apex, rather distinctly convex, irregularly rugoso-punctate.

Elytra twice as long as wide, 4.1 times the length and 1.3 times the width of pronotum, gently widened posteriad, widest at apical 3/8; dorsum rather strongly convex, depressed at basal 1/5, highest at basal 1/4; disc with rows of rather large quadrate punctures, upper edge of each puncture with a granule on each side; intervals irregularly wrinkled and sculptured, often transversely ridged and connected with one another, sutural ones feebly ridged, 3rd, 5th and 7th intervals ridged, 3rd distinctly so.

Legs rather stout, without peculiarities (though the mesotarsi are lost in the type material); ratios of the lengths of pro-, (meso-) and metatarsomeres: 0.3, 0.2, 0.2, 0.25, 1.2; —, —, —, —, —; 0.65, 0.25, 0.35, 1.25.

Male genitalia fusiform, gently curved in lateral view, 0.9 mm in length and 0.18 mm in width; fused lateral lobes nib-shaped, 0.4 mm in length.

Body length: ca. 5 mm.

Holotype: ♂, Cinchona, 1,200 m, Anamala Hills, southern India, IV-1964, P. S. NATHAN leg. (MNHNP).

Notes. This new species is remarkable in having the small body with head and pronotum coarsely and closely rugoso-punctate, and the elytra with rows of somewhat quadrate punctures and distinctly ridged odd intervals. Each upper surface of elytral punctures is provided with a pair of granules. This is one of the important characteristics of the members of the species-group of *Strongylium cultellatum* MÄKLIN, 1864.

Strongylium keralaense sp. nov.

(Fig. 13)

This new species somewhat resembles the preceding new one, *S. cinchonaense* sp. nov., but is distinguishable from the latter by the following characteristics:

Body larger (9 mm) and stouter; coloration and lustre almost the same as in *S. cinchonaense*: reddish brown and feebly sericeously shining; each surface almost glabrous. Oblong, noticeably convex.

Head semicircular, flattened, closely punctate, the punctures often rugose on vertex, each with a bent hair; clypeus subelliptical, weakly bent downwards in front, fronto-clypeal border widely arcuate and clearly sulcate; genae gently dilated, depressed in posterior portions before eyes, with outer margins weakly raised and rounded; frons rather wide, mildly inclined forwards, with a vague impunctate area medially; eyes rather small and transversely comma-shaped, gently convex laterad, roundly inlaid into head, diatone slightly more than twice the width of an eye diameter; vertex obviously not convex but with an impression in middle. Antennae reaching basal 1/8 of elytra, with 4 apical segments weakly thickened, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.75, 0.7, 0.58, 0.55, 0.55, 0.5, 0.4, 0.38, 0.5.

Pronotum quadrate and obviously wider, 1.38 times as wide as long, widest at the middle; apex bisinuous, rimmed, the rim thickened in middle; base very feebly bisinuous, finely bordered and rather roughly and thickly rimmed; sides steeply inclined, produced laterad, carinulate, the carinulae denticulate and visible from above; front angles obtuse, hind angles slightly acute; disc moderately convex on each side, longitudinally depressed in middle, with a pair of somewhat crescent-shaped depressions at basal 1/4, strongly rugoso-punctate, each puncture with a short bent hair, borders among punctures neither so distinctly ridged nor so much pointed as in *S. cinchonaense*. Scutellum triangular with rounded sides, rather distinctly convex, somewhat longitudinally aciculate.

Elytra twice as long as wide, 4 times the length and 1.3 times the width of pronotum, feebly widened posteriad, widest at apical 1/3; dorsum rather strongly convex, highest at basal 1/4; disc with rows of large quadrate punctures, upper edge of each puncture with a granule on each side; intervals weakly micro-shagreened, scattered with microscopic punctures, each with a bent hair, 3rd interval distinctly ridged, the ridge irregularly aciculate, haired and sparsely punctate.

Legs rather stout, without peculiarities; ratios of the lengths of pro-, meso- and metatarsomeres: 0.35, 0.21, 0.23, 0.25, 1.2; 0.6, 0.4, 0.35, 0.35, 1.3; 0.76, 0.3, 0.25, 1.25.

Holotype: ♀, Cinchona, Anamala Hills, southern India, V-1957, P. S. NATHAN leg. (MNHNP).

Strongylium pallavum sp. nov.

(Fig. 14)

Brown, antennae, head, pronotum, apical portions of femora, basal and apical portions of tibiae, tarsi, etc., darker in colour, dorsal surface with feeble dark greenish tinge, basal portions of femora, middle portions of tibiae and maxillary palpi pale yellow, head and pronotum somewhat sericeously shining, scutellum and elytra rather strongly, somewhat vitreously shining; each surface almost glabrous. Rather elongate, gently convex longitudinally.

Head subdecagonal, feebly convex, weakly micro-shagreened, closely and irregularly punctate; clypeus transverse, weakly bent downwards in front, fronto-clypeal border feebly arcuate posteriad widely in middle, obliquely extending forwards on each side, and finely sulcate; genae moderately raised, with rounded outer margins; frons rather short and wide, mildly inclined forwards; eyes medium-sized, somewhat reniform, rounded laterad, obliquely inlaid into head, diatone $3/4$ times the width of an eye diameter; vertex vaguely depressed in middle, rather coarsely punctate. Antennae reaching humeri, 7 apical segments gently thickened, ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.55, 0.4, 0.38, 0.36, 0.37, 0.38, 0.36, 0.34, 0.6.

Pronotum subquadrate, 1.25 times as wide as long, widest at the middle; apex feebly produced and finely rimmed; base feebly sinuous on each side, with widely V-shaped ridge; sides steeply inclined and weakly produced laterad, carinulate, the carinae barely visible from above, and indistinctly denticulate at the middle; front angles rounded, hind angles subrectangular, slightly prominent; disc gently convex, weakly depressed in antero-medial and basal portions, weakly micro-shagreened, closely and rather coarsely punctate. Scutellum triangular, feebly elevated, sparsely scattered with microscopic punctures.

Elytra 2.15 times as long as wide, 3.85 times the length and 1.48 times the width of pronotum, very feebly widened posteriad, widest at apical $1/3$; dorsum rather strongly convex, highest at basal $1/5$; disc weakly micro-shagreened, grooved with rows of punctures, each puncture rather large, rounded at the bottom, quadrate at the upper edge, with a granule on each side; intervals gently convex, often transversely ridged and connected with one another, sparsely scattered with microscopic punctures.

Ratios of the lengths of pro-, meso- and metatarsomeres: 0.24, 0.18, 0.18, 0.21, 1.2; 0.8, 0.55, 0.38, 0.33, 1.32; 0.75, 0.35, 0.27, 1.32.

Body length: 8.5–7.5 mm.

Holotype: ♀, Mercara, Coorg Dist., Mysore State, southern India, V-1973, no collector's name (MNHNP). Paratype: 1 ex., Agumbe Ghat, Shimoga Dist., Mysore State, S India, V-1974 (NHNP).

Notes. This new species is also a member of the species-group of *Strongylium cultellatum* MÄKLIN, 1864, but can be easily distinguished from the others by the peculiarly coloured legs.

Strongylium elongatissimum sp. nov.

(Fig. 15)

An isolated species recognized at first sight on its elongated body with peculiar head.

Brown, meso- and metafemora darker in colour, dorsal surface with very feeble dark greenish lustre, ventral surface somewhat alutaceous; each surface almost glabrous. Distinctly elongate, gently convex longitudinally.

Head somewhat transversely elliptical, gently convex, weakly micro-shagreened, closely, finely punctate; clypeus transverse, widely depressed in basal portion, weakly bent downwards in front, fronto-clypeal border extremely widely arcuate, finely though clearly sulcate; genae short and oblique, depressed at the postero-internal portions before eyes, with outer margins rounded and gently raised; frons widely Y-shaped, gently inclined forwards, slightly ridged on each side; eyes rather large, rounded laterad, obliquely inlaid into head, diameter $1/6$ times the width of an eye diameter; vertex vaguely depressed in middle. Antennae rather filiform, though 3 apical segments are lost in the type material, ratio of the length of each segment from basal to apical: 0.7, 0.2, 0.5, 0.27, 0.28, 0.8, 0.8, 0.8, —, —, —.

Pronotum trapezoidal, 1.2 times as wide as long, widest at the middle and base; apex almost straight and finely rimmed; base gently ridged, feebly sinuous on each side; sides steeply inclined, with lateral margins gently arcuate laterad, feebly sinuate before base, almost devoid of carinulae; front angles rounded, hind angles feebly acute; disc gently convex, very weakly depressed before base on each side, weakly micro-shagreened, frequently scattered with punctures. Scutellum sublinguiform, feebly elevated, micro-shagreened and micro-aciculate.

Elytra 3 times as long as wide, 5 times the length and 1.5 times the width of pronotum, subparallel-sided; dorsum rather strongly convex longitudinally, highest at basal $1/6$; disc grooved with rows of punctures, each puncture rounded at the bottom, somewhat transversely quadrate at the upper edge, without granule on each side, 5th and 6th grooves connected with each other close to base and impressed; intervals gently convex, often transversely ridged and connected with one another, weakly micro-shagreened and often irregularly micro-aciculate.

Ratios of the lengths of pro-, meso- and metatarsomeres: 0.36, 0.31, 0.28, 0.25, 1.2; 1.0, 0.65, 0.5, 0.38, 1.2; 1.3, 0.6, 0.4, 1.1.

Body length: ca. 9.6 mm.

Holotype: ♀, Mercara, Coorg Dist., Mysore State, southern India, V-1973, no collector's name (NHNP).

Strongylium ferreri sp. nov.

(Fig. 16)

This new species resembles *Strongylium angusticolle* MÄKLIN, 1864, from "India

orientali (Sylhet)", but can be easily distinguished from the latter by the following characteristics:

Body slenderer and subcylindrical; piceous with bluish black tinge, head and pronotum with feeble ironish or brassy lustre, elytra with weak brassy lustre broadly in middle, and dark greenish tinge in lateral portions, antennae and femora reddish brown; head and anterior portion of pronotum slightly sericeously shining, posterior portion of pronotum, scutellum and elytra gently, sericeously shining.

Head smaller, smoother, less noticeably punctate; clypeus remarkably projected apicad, with an impression before fronto-clypeal border, which is shorter and almost straight, clearly sulcate; genae nearly of the same shape as in *S. angusticolle*; frons obviously wider, somewhat T-shaped, steeply inclined forwards, with a more noticeable, longitudinal impression; eyes comparatively small, less deeply, obliquely inlaid into head, diatone wider, slightly more than 1/3 times the width of an eye diameter; vertex with a weaker, somewhat rhombical impression in middle. Antennae slightly thicker, reaching humeri; ratio of the length of each segment from basal to apical: 0.6, 0.2, 0.85, 0.8, 0.67, 0.65, 0.64, 0.62, 0.57, 0.55, 0.6.

Pronotum longer, barrel-shaped, 0.83 times as wide as long, widest at the middle; apex and base more finely rimmed; sides less steeply inclined, gently produced laterad, very feebly sinuate before base, more finely rimmed, the rims hardly visible from above; front angles rounded, hind angles subrectangular; disc more noticeably, somewhat parabolically swollen in apical 1/8, mildly inclined towards base in basal 1/3, less frequently, more finely punctate in anterior portion, more coarsely, somewhat transversely punctate and micro-shagreened in posterior portion, the punctures in posterolateral portions often transversely fused with one another, forming rugosities. Scutellum triangular, weakly micro-shagreened, sparsely scattered with microscopic punctures.

Elytra obviously slenderer, 2.74 times as long as wide, 3.17 times the length and 1.4 times the width of pronotum, slightly widened posteriad, widest at apical 3/10, though gently constricted at basal 2/5; dorsum more simply convex, without swellings unlike that in *S. angusticolle*, only feebly undulate at the middle, weakly depressed along scutellar striae; disc punctato-striate, though the striae are often interrupted by transverse ridges, each puncture small and rounded at bottom, rather large and irregularly shaped at upper edge, those in apical 1/3 distinctly smaller, 1st to 5th striae impressed close to base; intervals more noticeably transversely ridged in anterior portion, gently convex in posterior portion, noticeably micro-shagreened and scattered with microscopic punctures.

Ratios of the lengths of pro-, meso- and metatarsomeres: 0.24, 0.2, 0.22, 0.21, 1.2; 1.6, 0.7, 0.63, 0.47, 1.38; 2.2, 0.73, 0.6, 1.38.

Body length: 16–17.5 mm.

Holotype: ♀, Santikoppa, North Coorg, Mysore State, southern India, 4~10-V-1914, FLETCHER leg. (NHML). Paratype: 1 ex., Poonmudi Range, Trivandrum Dist., Kerala State, southern India (coll. FERRER).

Notes. This new species closely resembles *Strongylium shimogaense* sp. nov., from Agumbe Ghat in Mysore State, but can be distinguished from the latter by the body distinctly elongate and dark greenish, with pronotum more distinctly swollen, and elytra distinctly transversely wrinkled in anterior halves.

要 約

益本仁雄：アジア産ナガキマワリ族(Strongyliini)の研究。III. フランス国立自然史博物館および英国自然史博物館所蔵の南部インドのナガキマワリ属(*Strongylium*)の新種。——アジア産ナガキマワリ族の研究の第3回として、フランス国立自然史博物館(パリ)、および英国自然史博物館(ロンドン)所蔵の南部インドのナガキマワリ属を取り上げた。これまでに、この地域からの報告や新種記載はきわめて少なく、後者にいたってはわずかに5種程度にすぎない。今回の小論では、16種の新種を記載した。

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New Records of *Strongylium* (Coleoptera, Tenebrionidae) from Northern Thailand

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In the course of the study of strongyliine tenebrionids from East Asia, I had the opportunity of examining specimens of the following species of *Strongylium* from northern Thailand.

1) *Strongylium angustissimum* PIC, 1922

Local distribution. 1 ex., Doi Suthep, Chiang Mai Prov., 3–V–1985, M. TAO leg.; 1 ex., same loc., 20–V–1985, M. TAO leg.; 1 ex., nr. Chiang Mai, 1,300 m alt., 17–V–1987, H. HIRASAWA leg.

General distribution. China (Yunnan); Thailand (new record; also occurs in Kanchanaburi of western Thailand).

2) *Strongylium auratopubens* PIC, 1922

Local distribution. 3 exs., Doi Suthep, 11-V-1985, M. TAO leg.; 1 ex., nr. Chiang Mai, 3-V-1994, K. KUME leg.; 1 ex., Wieng Ko Sai, Phrae Prov., 19-V-1985, Y. KOMIYA leg.

General distribution. Vietnam (Tonkin); Thailand (new record; also occurs in Kanchanaburi of western Thailand).

3) *Strongylium crurale* FAIRMAIRE, 1893

Local distribution. 1 ex., Doi Suthep, 1,100 m alt., 23-V-1982, T. SHIMOMURA leg.; 1 ex., same loc., 11-V-1985, M. TAO leg.; 1 ex., same loc., V-1985, A. COTTON leg.; 1 ex., Wieng Ko Sai, 18-V-1985, H. AKIYAMA leg.; 1 ex., Chiang Dao, Chiang Mai Prov., 1989, no collector's name; 1 ex., Fang-Chiang Dao, Chiang Mai Prov., 22~23-V-1989, K. MASUMOTO leg.; 2 exs., nr. Chiang Mai, 1,300 m alt., 17-V-1987, H. HIRASAWA leg.; 1 ex., Doi Sang, Chiang Mai Prov., 5-VI-1993, K. KUME leg.; 2 exs., same loc., 26-V-1990, K. KUME leg.

General distribution. Vietnam (Tonkin); Thailand (new record; also occurs in Kanchanaburi of western Thailand).

4) *Strongylium erythrocephalum* (FABRICIUS, 1801)

Local distribution. 1 ex., Doi Suthep, 11-V-1985, M. TAO leg.; 2 exs., nr. Chiang Mai, V-1985, A. COTTON leg.; 1 ex., Wieng Ko Sai, 18-V-1985, M. SAWAI leg.

General distribution. Widely distributed in the Oriental Region.

5) *Strongylium sparseimpressum* PIC, 1922

Local distribution. 2 exs., Nr. Chiang Mai, VII-1996, native collector; 2 exs., Chiang Mai, 1988, no collector's name; 2 exs., Doi Pui, Chiang Mai Prov., V-1986, A. COTTON leg.; 1 ex., Wiang Pa Pao, Chiang Rai Prov., no further data.

General distribution. Laos; Thailand (new record).

Notes. Individuals from northern Thailand are slightly different in shape from those of Laos (type area), probably due to local variation.

6) *Strongylium varians* (PASCOE, 1883)

Local distribution. 1 ex., Doi Suthep, 1,300 m alt., 27-IV-1980, K. KINUGASA leg.

General distribution. Malay Peninsula; Sumatra; Thailand (new record).

7) *Strongylium viridimembris* PIC, 1922

Local distribution. 1 ex., Doi Suthep, 1,100 m alt., 14-V-1982, T. SHIMOMURA leg.; 1 ex., same loc., 29-V-1985, Y. KOMIYA leg.; 4 exs., same loc., 11-V-1985, M. TAO leg.; 1 ex., Doi Pui, 3-VI-1986, H. HIRASAWA leg.; 1 ex., Konthanthan, nr. Chiang Mai, 1-VI-1986, H. HIRASAWA leg.; 1 ex., Doi Sang, 5-VI-1993, K. KUME leg.; 1 ex., Chiang Dao, 1989, native collector.

General distribution. Vietnam (Tonkin); Thailand (new record; also occurs in Kanchanaburi of western Thailand).

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