

A CONTRIBUTION TO THE STUDY OF THE FAUNA OF
UKEREWE ISLAND, VICTORIA NYANZA.

(Col.: Curculionidae; Apioninae.)

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Very little has been published on the Coleopterous fauna of this interesting island near the Tanganyika shores of Victoria Nyanza. The Apioninae listed below, amounting to twenty-three species, are all due to the collecting of Father P. A. Conrads, S.J. The specimens lack dates of capture. The collection includes three new species of *Apion* (including all subgenera), one new species of *Piezotrachelus*, and a new genus, *Lepanomus*, also known to me from South Africa. Of the twenty-three species listed only two species named and one un-named unique female belong to *Piezotrachelus*, a genus including a very large number of species from Tropical Africa. The large preponderance of species belonging to *Apion*, in the restricted sense, is unusual and it will be interesting to discover if this preponderance is actual within the area, and if so what conditions account for it. Of the previously described species I have indicated the known distribution, whether published or unpublished.

1. *Apion consimile* Wagn. (*Apion russeolum* Mshl. in coll. nec Wagn.).
Thirty-six specimens.

Tropical Africa from Sierra Leone to Zanzibar and south to the Cape.

2. *Apion mimosae* Htm. 7♂♂, 3♀♀.

Described from Tanganyika; known also from Natal.

3. *Apion* sp. near *triviale* Fhs. 2♀♀

4. ***Apion brunneorufum* n.sp.**

Apion spadiceum Wagn. Stett. Ent. Zeit., 69, 1908: 66 (*ex parte*), (Eritrea).

Extremely similar to *Apion spadiceum* Wagn. from South Africa, with which it has hitherto been confused, of very much the same size, the rostrum less unequal between the sexes, stouter, particularly so in the female; the pronotum less distinctly punctured, the punctures shallower, the colour generally darker in mature specimens. The only clear external character is the proportionally shorter, broader scales which are less distinctly bilinear on the interstitial costae (unilinear in both species on the sutural margin), particularly on the external interstriae. As in *spadiceum* the four hind tibiae of the male have a strong interno-apical spur. The aedeagus is quite distinct, being abruptly attenuated to the apex in *brunneorufum* whereas in *spadiceum* the apex is produced into a parallel-sided curved blunt termination.

Length: 1.78 to 2.34 mm. (*sine rostro*).

AFRICA: Tanganyika Territory; Victoria Nyanza, Ukerewe Island, (P. A. Conrads leg.), 27♂♂, 33♀♀. Abyssinia; Mt. Chillálo, forest circa 9,000 ft., 12.xi.1926, (H. Scott coll.), 1♀, (*A. spadiceum* Wagn., det. J. Balfour-Browne, 1942). ARABIA: Yemen, (Millingen, Fry coll.), 1♂, 3♀♀, (*A. spadiceum* Wagn., det. Wagner). West Aden Protectorate; Jebel Harir, circa 5,200 ft., 29.x.1937, (British Museum Expedition to South-West Arabia, 1937-38). Yemen; Wadi Thabad, north face of Jebel Sabir, 5,900 to 6,000 ft., 25-26-xii-1937; Usafira, one mile north of Ta'izz, circa 4,600 ft., 13.xii.1937; Ta'izz, lower slopes of Jebel Sabir, circa 4,600 ft., 15.xii.1937; Jebel Sumara, circa 9,200 ft., 2-i-1938, (British Museum Expedition to South-West Arabia,

1937-38), 8♂♂, 7♀♀. INDIA: Madras; North Salem District: Jawalagiri, 9.iii.1930; Ayur, 9.i.1931; Daverbetta, 25.iii.1930; Denkanikota (N. C. Chatterjee coll.), 25.iii.1930, (in collection of Forest Research Institute, Dehra Dun), 3♂♂, 2♀♀.

The type male and allotype female are selected from the Tanganyika series.

The occurrence of this species in South India is rather surprising, but there is no possibility of a mistake in the labelling and if not a natural endemic species it has presumably been introduced. The southern limit of this species in Africa is not known, nor is the northern limit of *spadiceum* Wagn. Apart from the specimens mentioned below, the only records of "*spadiceum*" I know are in Marshall (J. East Africa Uganda Nat. Hist. Soc., 15 (1, 2), 1940, 56) from the Chyulu Hills, Kenya. I have not seen these specimens, but I have little doubt that they will prove to be *brunneorufum*.

Apion spadiceum Wagn. Stett. Ent. Zeit., 69, 1908: 66 (*ex parte*), (South Africa).

The present species is not included in the fauna of Ukerewe Island, but as it was described it has proved to be a composite species and accordingly some observations seem called for in view of the description of *brunneorufum* above.

Spadiceum was described from six specimens, one male and two females from the Cape: Dunbrody, (coll. Hartmann), and two males and one female from Eritrea: Adi Ugri and Keren, (Mancini, coll. Solari). It is there stated that the Eritrean specimens only differ from those from the Cape in the slightly less distinct pronotal punctuation and the darker colour. From this it is to be deduced that the type is from Dunbrody.

In the British Museum, there are two males from Natal: Malvern, October, 1897, (G. A. K. Marshall coll.), and one female from Cape of Good Hope: Table Mountain, (W. Bevins coll.) all identified as *spadiceum* by Wagner. There are also one male and three females from Arabia: Yemen, (Millingen, Fry, coll.) also identified by Wagner himself as *spadiceum*. The Arabian specimens seemed to be nearer the description of the Eritrean specimens and a dissection showed that the aedeagus was distinct from that of the Cape specimens. Consequently, doubt was thrown on the conspecificity of the Cape and Eritrean material. I have, therefore, studied all the available material additional to the above, as follows: Cape: Dunbrody, 1♂, 1♀, (Father O'Neil, S.J., in Marshall collection). These specimens are topotypes. There are also twelve specimens in Marshall's collection from Natal: Malvern, Verulam, Eastcourt and Uitenhage all determined by Wagner. In the British Museum, there are two males from Natal: Malvern, October, 1897, (G. A. K. Marshall coll.), one female, Cape of Good Hope: Table Mountain, (W. Bevins coll.), five males and five females, South Africa: Pondoland, Fort St. John, April, June, and July, 1923, March, 1924, (R. E. Turner coll.), two females, Zululand: Eshowe, May and June, 1926, (R. E. Turner coll.), South Zululand: Gingindhlovu, April, May, June, and July, 1926, (R. E. Turner coll.) and all the material detailed under *rufobrunneum* sp.nov. above. Males of all the material listed above have shown that the aedeagus is identical with that of the topotype male from Dunbrody only in material from South Africa, Natal and Zululand. This area, therefore, constitutes the area of distribution of *spadiceum* and all northern material is *brunneorufum*.

5. *Apion aethiopicum* Wagn. 7♂♂, 4♀♀.

Described from material from Bulawayo, Southern Rhodesia, not recorded from elsewhere, but the above material is undoubtedly conspecific with the types in the British Museum.

6. *Apion ukerewense* sp.nov.

Male. *Derm* black, not very shining, with a clothing of fine greyish-white and golden hairs that become broader and more scale-like on the venter. Scutellum elongate, triangular with paired basal processes.

Head one-quarter wider than long (2.2:1.5), eyes moderately prominent, frons with a parallel, shallow longitudinal impression on either side of the middle line, surface finely microreticulate, temples linear; frons half the width of the base of the rostrum; beneath the eyes a patch of long greyish-white scales. *Rostrum* barely longer than the head and pronotum together, stout, curved, cylindrical but with a slight dilation at the antennal insertion; the base, to the antennal insertion finely microreticulate, thence to the apex smooth and shining; dorsally finely and somewhat obsoletely punctured, laterally and ventrally with punctures impressed in distinct longitudinal furrows with a porrect scale arising from each puncture; basilateral sulci distinct; the space between the eye and the antennal insertion equal to the diameter of the eye. *Antennae* piceous, slender; the scape long, as long as the first five segments of the funicle taken together; basal segment of the funicle one-third the length of the scape, twice as wide as long, twice as long as the second segment of the funicle; third to seventh segments of the funicle progressively shorter and broader. *Pronotum* broader than long, widest at the base, a little less than one-third narrower at apex than at base, subapical constriction moderately distinct; dorsal outline very slightly convex; surface densely but evenly and obsoletely punctured, the punctures separated by about their diameters; the entire surface, including the punctures, microreticulate; a sharply impressed median dorsal sub-basal longitudinal fovea. *Scutellum* elongate triangular with paired basal protuberance and upturned pointed apex. *Elytra* ovate, sides moderately rounded; humeral callus distinct; dorsal outline moderately convex; striae sharply and distinctly impressed, distinctly catenulate punctate; striae 1 and 2 uniting with 9 at apex; interstriae flat, as wide as the striae, obsoletely rugose, obsoletely biseriate-punctate on the disc; the clothing on the basal and apical thirds of the dorsum and the entire length of the sides of greyish-white hairs, on the discal third of golden-reddish hairs mixed with a few greyish-white ones. *Venter*: the procoxae anteriorly and the mesosternal episterns moderately densely clothed with whitish scales; metasternum and first and second sternites evenly, but not closely, punctured. *Legs* short and rather stout, the four hind tibiae with stout interno-apical spine; the claws long, with short but distinct basal tooth.

Length: 2.18 to 2.71 mm. (*sine rostro*).

TANGANYIKA TERRITORY: Victoria Nyanza, Ukerewe Island (*P. A. Conrads leg.*), 2♂♂.

This species is a member of the *tanganum*-group, and of the *armipes* sub-group, typified by the elongate armed scutellum and short basal tooth of the claws. It is near *aethiopicum* Wagn. in appearance, but the rostrum is distinctly longer in the male of that species, the elytral striae are sharply impressed and the interstriae are flat. It also comes close to *brunneorufum* m., described above, but is quite black and the clothing appears sparser.

7. *Apion armipes* Wagn. 1♂, 2♀♀.

Described from Malvern, Natal. Also recorded from West Africa: Gambia.

8. *Apion grandaevum* Wagn. 1♂, 2♀♀.

Described from Chirinda Forest, Rhodesia, and from Umtali, Natal.

9. *Apion abimva* Burg. 1♀.
From the Belgian Congo and Kenya: Chyulu Hills.
10. *Apion tanganum* Htm. 2♂♂.
Described from Tanga, Tanganyika. I have not seen the types, but the two specimens answer the description of Hartmann in all respects.
11. *Apion considerandum* Fhs. 3♂♂, 2♀♀.
Tropical Africa from the Gambia to Zanzibar and Abyssinia and south to the Cape. These specimens are of the typical form.
12. *Apion ? nigritulum* Wagn. 1♀.
Described from Natal: Frere. In the absence of males I am not certain of the identification of this species but it agrees well with the type of Wagner in the British Museum.
13. *Apion griseopilosum* Wagn. 5♂♂, 3♀♀.
Described from Natal: Verulam, and from Dunga (? patria), the present series agrees well with Wagner's types in the British Museum.
14. *Apion* sp. 1♀.
15. *Apion* sp. (c.f. *geminum* Wagn.). 1♀.
In the absence of males identification of the specimen is doubtful, but it is close to, if not identical with *geminum* Wagn.
16. *Conapion schoutedianum* Burg. 1♀.
Recently described from the Congo. There is a specimen in the British Museum from Uganda: Bugwezi. Both individuals have been compared with a co-type of Burgeon's.
17. *Conapion admirabile* Wagn. Six specimens (det. Marshall).
Described from Angola and also known from Uganda.
18. **Conapion conradsi** sp.nov.
♂♀. *Derm* black, dull, distinctly shagrinata, almost glabrous, only a short, sparse, barely discernible whitish pubescence which gives a somewhat dusty appearance to the insect. Of the *constrictum*-group, and very closely related to *dives* J.B.-B., [Ann. Mag. Nat. Hist., (Ser. xi), 9, 1942; 808] from Abyssinia.
Head a little wider than long (1.3:1.0), eyes moderately prominent, the frons about half as wide as the base of the rostrum, with a shallow longitudinal impression on either side of the middle line which is weakly arched, distinctly microreticulate; temples short, about one-third the diameter of the eye, microreticulate. *Rostrum* of the male as long as head and pronotum taken together, of the female distinctly longer, slightly attenuate to the apex, coarsely microreticulate to the apex, weakly curved: basi-lateral sulci distinct but shallow; the space between the eye and the antennal insertion one-third longer than the diameter of the eye. *Antennae* rufo-piceous to piceous, slender, inserted at one-third from the base of the rostrum; scape short, not longer than the basal segment of the funicle which is one and a half times longer than wide and twice as long as the second segment; antennae of the male shorter than those of the female. *Pronotum* cylindrical, little longer than wide; sub-basal constriction obsolete, sub-apical constriction moderately distinct; dorsal outline almost flat; evenly but very shallowly punctured, sides quite obsolete so;

distinctly microreticulate. *Scutellum* small, flat, short triangular, as long as wide at the base. *Elytra* oval, sides well-rounded, widest at middle; humeral callus distinct; striae distinctly impressed on the disc, obsoletely towards the sides, the catenulate punctures distinct on the discal striae, obsolete towards the sides; striae 1 and 2 uniting with 9 at the apex; intervals weakly convex, rather obsoletely microreticulate. *Venter*: metasternum impunctate, microreticulate; first and second sternites with a few coarse but shallow punctures laterally; fifth sternite of the female flat, impunctate, obsoletely microreticulate. *Legs* long and slender, hind femora not quite reaching the apex of the elytra; basal segment of the hind tarsus as long as the second and third segments taken together.

Length: 1.65 to 2.02 mm. (*sine rostro*).

TANGANYIKA TERRITORY: Victoria Nyanza, Ukerewe Island, (*P. A. Conrads leg.*). Nine specimens.

This little species is very close to *dives* J.B.-B., but the elytral convexity in the antero-posterior plane is more evenly pronounced, so that the posterior declivity is steeper; the sub-basal pronotal constriction is obsolete; the rostrum is longer and the aedeagus is more evenly curved from base to apex although very similar to that of *dives*.

19. *Pseudopiezotrachelus sparsum* Fst. Two specimens.
Tropical Africa from Senegal to Zanzibar.

20. *Piezotrachelus varium* Wagn. Sixteen specimens.
East Africa from the Sudan south to Portuguese East Africa.

21. *Piezotrachelus* sp. (near *cylindrirostre* Wagn.). Two specimens.
This species is extremely close to *cylindrirostre*, but is not, I think, conspecific therewith.

22. *Piezotrachelus* sp. 1♀.

23. **Lepanomus** gen.nov.

Head broad, eyes lateral and convex. *Rostrum* short and stout, broad, shorter than the pronotum; scrobes wide and deep, the sides diverging, the lower side directed ventrally, the upper directed to the lower margin of the eye, the ventral sides meeting below the rostrum as a well-marked transverse ridge or step. *Antennae* longer than the rostrum, 11-segmented, the funicular segments of nearly the same width throughout; club elongate fusiform, loosely segmented, the basal segment short, not longer than the second segment. *Scutellum* very small but distinct. *Elytra* elongate-oval, with nine deep and regular striae. *Legs* short and stout; the third tarsal segment deeply cleft nearly to the base.

Genotype: **Lepanomus crinalis** sp.nov.

This new genus is very distinct from all hitherto described in the Apioninae, but it appears to be most nearly related to *Aplemonus* (the name proposed being an anagram thereof). It is readily distinguished by the nearly parallel-sided form, the unusual form of scrobe, the loose antennal club and the lesser convexity of the elytra.

Lepanomus crinalis sp.nov.

♂♀. *Derm* piceous-brown, with a slight metallic lustre, a pale V-shaped flavescent mark directed anteriorly and a rounded flavous spot on the second interstria two-thirds from the base; a copious, but not dense,

clothing of moderately long whitish or golden hairs, those of the elytra set in a curious irregular pattern of small patches, the hairs irregularly disposed, not aligned posteriorly, the areas between the patches glabrous. The elytra interstriae with sparse, evenly placed and linearly disposed erect brownish setae, of uniform diameter from base to the blunt apex, slightly backwards curved, these setae set in strong punctures; underside with a sparse clothing of long white hairs; femora with white or grey setae of a similar character to those of the elytral interstriae.

Head twice as wide as long, the eyes prominent and strongly convex, temples short, ill-defined; frons one-third narrower than the base of the rostrum, with a strong median fovea and coarse punctures. *Rostrum* short and stout, shorter than the pronotum, rather flattened dorsoventrally, twice as long as wide at the base, more sparsely punctured near the apex, strongly, irregularly and densely punctured at the base, surface shining; the antennal scrobes deep, directed postero-ventrally where they form a distinct transverse carina or step. *Antennae* long and stout, inserted at two-fifths from the base of the rostrum, the scape short and stout, about one and one-half times longer than wide and barely longer than the basal segment of the funicle which is as long as, but no wider, than the second segment; segments three to seven progressively shorter; club elongate fusiform, loosely aggregated. *Pronotum* a little longer than wide, parallel-sided. dorsal outline nearly flat, fairly densely and rather strongly but irregularly punctured; evenly clothed with longish adpressed irregularly disposed white hairs and with sparser brownish curved setae; at the base, just in front of the scutellum, with a strongly impressed elongate fovea. *Scutellum* very small, oval, rather variable in form but apparently with the anterior edge raised and finely nicked in the middle. *Elytra* elongate-oval, sides slightly rounded; dorsal outline moderately convex; humeral callus distinct; striae narrow but deeply impressed, the catenate punctures rather obsolete; interstriae flat at the base, convex on the disc, particularly the third which is almost costiform at the beginning of the declivous portion of the elytra; clothing as already described, but with a distinct tuft of whitish hairs at the base of the third interstria. In all the specimens the wide V-shaped discal band, extending from the suture to the fifth stria, is distinct; the other flavescent marks are variable. *Legs* short and stout, with numerous whitish blunt-ended setae, particularly on the femora; tarsi short and stout, the third segment deeply cleft almost to the base; tarsal claws with a small basal tooth. No sexual dimorphism other than that of the fifth sternite.

Length: 2.99 to 3.42 mm. (*sine rostro*).

TANGANYIKA TERRITORY: Victoria Nyanza, Ukerewe Island, (P. A. Conrads leg.). Five specimens.

NATAL: Umhlali Beach, xii.1913, one specimen (G.A.K.M.). Malvern, ix.1897, one specimen (G.A.K.M.). In Marshall's collection.

SOUTH AFRICA: Pondoland, Port St. John, May 1-14, 1923, (R. E. Turner coll.). Eighteen specimens.

The type specimen has been selected from the series from Pondoland. There is some variation in the degree of impression of the thoracic punctuation and in the colour pattern, the punctuation of the southern specimens being finer and denser than the Tanganyika examples, but I do not think that there are any differences that can be called specific.

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