

A new Species of *Tarsocera* Butler (Lepidoptera: Satyridae) from the Cape Province

By C. G. C. DICKSON

Although this species is fairly close, superficially, to *T. dicksoni* (van Son)* the male genitalia are decidedly different in certain respects and, especially as regards the aedeagus, more like those of *T. cassus* (L.). On the upperside of the forewing there is less fulvous colouring in the lower median area, in the male, and with the colouring here duller than in the corresponding sex of *dicksoni*; while other differences are noted hereunder.

Tarsocera southeyae spec. nov.

Male. Upperside.

Forewing. Fulvous colouring distinct in cell up to a black cross streak, and less distinct from this streak to end of cell and up to the large sub-triangular reddish area. Below cell, a fairly small wedge-shaped fulvous marking from near base does not extend clearly beyond a point approximately below origin of vein 2, the distinct reddish colouring here, being bounded outwardly by a short downward dark streak from origin of this vein—and the outward restriction of the reddish marking at this point being a good character by which to distinguish *T. southeyae* from *T. dicksoni*. The large reddish patch which partly surrounds the prominent, black, bipupillate sub-apical ocellus, clearer and more sharply defined than in *dicksoni*, and of a rather lighter and more salmon-coloured tone than in that species.

Hindwing. As in *dicksoni*, including the reddish-ringed ocelli, varying in number from 3-4 in different specimens.

Underside.

The dark ground-colour of a rather less dark tone, on the whole, than in *dicksoni*.

Forewing. Very similar to that of *dicksoni* (allowing for variation in different specimens) but the light, irregular submarginal line running down to, or a little below, vein 2 rather less sharply defined and further from the wing-margin.

Hindwing. The irregular curved transverse streaks and other dark markings less distinct and, where present, the light edgings of the markings not as clear as is usual in *dicksoni*.

Body and ancillary parts superficially very much as in the two allied species; but the antennae (except in one specimen, in which it is pronounced) without, or with less, ochreous colouring, in places.

*Van son, G., 1962. J. ent. Soc. S. Afr., **24** : 142-146, Pl. II.

EXPLANATION OF PLATE III.

Tarsocera southeyae spec. nov.

- Fig. 1—♂ Holotype, *Tarsocera southeyae* spec. nov. (upperside).
 Fig. 2—♂ Holotype, *Tarsocera southeyae* spec. nov. (underside).
 Fig. 3—♂ Genitalia of *T. cassus* (L.). (Signal Hill, Cape Town. 24.x.1968.)
 Fig. 4—♂ Genitalia of *T. dicksoni* (v. Son). (Piquetberg Mtn., 30.x.1956.)
 Fig. 5—♂ Genitalia of *T. southeyae* spec. nov. (Jansenville, 27.ix.1968.)

Figures of imago approximately natural size.

Figures of genitalia 14 times natural size.

Length of forewing: 24-25.5 mm. (the former measurement, in holotype).

♂ Holotype, EASTERN CAPE PROVINCE: Jansenville, 27.ix.1968 (Mrs. R. J. Southey); specimen presented by Mrs. Southey to the British Museum (N.H.); British Museum Reg. No. Rh. 17105.

Paratype in the author's collection, data as holotype, 1 ♂.

Paratypes in Coll. R. J. Southey, as holotype, 4 ♂.

Paratypes in Coll. Transvaal Museum, as holotype, 1 ♂; Willowmore, 13.ix.1958, 1 ♂ (H. D. Brown).

This species can be separated at a glance from *T. cassus* on account of the far more extensive fulvous colouring in the forewing of the latter (i.e., if the males only of each species are compared) and the less well defined and less bright reddish patch towards the apex. The female of *T. southeyae* has not as yet been identified. (In the foregoing connection, *T. cassus* from the Cape Peninsula is being considered; a particularly dark insect from the more easterly portion of the Cape Province has the fulvous of the forewing upperside less apparent than in *T. cassus* from nearer Cape Town, but has been found to have the same form of aedeagus and appears therefore to be conspecific with *cassus* from the Cape Peninsula, in spite of some difference in wing marking.)

T. southeyae, as a species, is, it is believed, also widely distributed in a westerly direction—judging by the similarity in the male genitalia of specimens from Little Namaqualand (Kamieskroon, etc.) to the genitalia of *southeyae* from Jansenville. The Namaqualand males which have been seen have not been as well coloured as regards the large reddish outer patch of the forewing upperside, this also applying to a male from S. of Doorn River (well S. of Van Rhyn's Dorp). In this latter specimen the fulvous colouring in the median area of the forewing is more noticeable, but the outer patch is reduced in size. The above specimens have the fulvous area of the forewing underside more restricted and darker than in most of the Jansenville examples of *southeyae*, but the markings of the hindwing underside and their light edgings are generally more distinct than in these specimens.

When studying this group of butterflies it is found that the aedeagus, with its strongly spined distal end, provides remarkably clear-cut taxonomic characters. The male genitalia of *T. cassus* (L.) and *T. dicksoni* (van Son) are figured in the accompanying plate (Figs. 3 & 4) for comparison with those of *T. southeyae* (Fig. 5). It should be mentioned that in the original description of *dicksoni* (*op. cit.*) the male genitalia of a species other than that of the holotype of *dicksoni* were depicted by van Son—both species concerned resembling each other closely in wing markings.

Referring briefly to the genitalia of *dicksoni* and comparing them with those of *cassus*, it will be seen immediately from the figures that the uncus and schaphium are much longer in the former species, while the aedeagi are quite distinct in each case, even apart from the difference in the distal ends. In *dicksoni* only three somewhat slender, almost straight and moderately long, pointed, distal spines are present, in addition to a very slender curved spine on the far side of these spines, corresponding to the very long curved spine of *cassus* but very much reduced in size.

In *T. southeyae* the uncus and schaphium are shorter than in *dicksoni*, but (if several preparations are compared) are found to differ little in length from those of *cassus*; the aedeagus (and especially its distal end) is very different from that of *dicksoni* and differs significantly, if less markedly, from that of *cassus*. The actual disposition and form of the spines have been found to be very constant in numerous specimens of *cassus* from widely separated localities, and to give positive proof of the identity of these specimens in all cases. The arrangement of the spines in *southeyae* is as follows:—One large central, pointed, upright spine, and to the near side of this (when viewing the aedeagus as it appears in the illustration) a spine of approximately half the length of the former and placed in a lower position, and below this latter spine and of about half its length, a spine with a decidedly rearward inclination; on the far side of the large central spine, a similarly broad-based but considerably shorter spine, with a short tooth-like spine anterior to it, and posterior to the second-last spine mentioned, a very long spine which curves forward well beyond the other spines; while the extreme distal end of the aedeagus consists of a stout projection with a rounded extremity (as in other species of the group). It should be mentioned that, in the figure, the large central spine has obscured a large part of the spine on the far side of it.

This beautiful Satyrid butterfly has been named with much pleasure after my friend Mrs. R. J. Southey of Steynsburg. The following note on the butterfly has been furnished by Mrs. Southey:—

“On my return from a trip to Namaqualand in September 1968, with Mr. and Mrs. Ken Pennington, I went from Cape Town to Port Elizabeth. Speaking to me on the phone, my husband R. L. Southey, who is a keen observer of nature, told me he had seen numbers of large dark brown butterflies on the roadside near Jansenville, and advised me to come home that way. I took his advice, and some distance from the village, on the road to Graaff-Reinet, I saw a few and with some considerable difficulty finally netted eight specimens. The 27th September was a very hot, windy day, and with closely stranded barbed wire fences over which they constantly flew, I was badly handicapped. Twice I scaled the fence, only to find my prey had returned to the road verge, to the coarse grass which was growing there. Invariably when the butterflies flew over or through the fences they settled for a few moments on the ground, in the shade of what I understand to be the “noons”—*Euphorbia ferox*—which is the overwhelmingly predominant vegetation in that area.

“A week earlier my husband had noticed these butterflies in great numbers, but apart from odd specimens at intervals along the road, which I took to be the same insects, there were not many to be seen on 27th September. Of the eight I caught four were worn and four moderately fresh, and it seemed possible that the brood had hatched some time earlier.

Dr. L. Vári kindly sent to the writer for examination and inclusion as a paratype the earlier example of *T. southeyae* (which had been taken by Mr. H. D. Brown at Willowmore), following a thorough investigation by him of the specimens and additional species of this group in the Transvaal Museum, from the point of view of the genitalia, with a view to eventual publication of the results of these studies.

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