No. 26

A New Race of *Myrina silenus* (F.) (Lepidoptera: Lycaenidae) from the North Western Cape

By C. G. C. Dickson and R. D. Stephen

Occurring in Little Namaqualand and for some distance further south but still in the more north-westerly portion of the Cape, this butterfly constitutes a race which differs quite appreciably from *Myrina silenus ficedula* Trimen, and can also be separated readily from *M. silenus deserticola* Stempffer from South West Africa. It is decidedly different from *M. silenus silenus,* which does not occur in Southern Africa. The characteristic features of this new race are given herunder.

Myrina silenus penningtoni subsp. nov.

Average size of both sexes below that of *M. silenus ficedula* and tails of hindwing not as long, and narrower, than in this race.

Male. Upperside.

Forewing. The ferruginous area not reaching the extreme distal-margin but bordered or at least edged here with brownish-black.

Hindwing. Inner-marginal area, the anal-lobe as a whole and the untwisted portion of the tail markedly whitish and much lighter than in *ficedula.*

Underside.

Forewing. No apparent constant difference, in comparison with *ficedula.*

Hindwing. The inner-marginal edging and the broad strip in lower half of inner-marginal area lighter and much whiter than in *ficedula.* (In some specimens of the latter race the upper edging of the inner-margin and a curved streak of light scaling bounding the upper part of the broad lighter strip are nearly as white as in *penningtoni*—but not the strip itself.)

Length of forewing: 15-16 mm. (the latter measurement, applying to holotype).

Female. Upperside.

Forewing. The dark costal border more clear-cut than in *ficedula* in relation to the ferruginous colouring, where the border approaches the blue area of the wing. (In the female

Myrina silenus penningtoni subsp. nov.

Fig. 1. ♂ Holotype (upperside) Fig. 2. ♂ Holotype (underside).
Fig. 3. ♀ Allotype (upperside) Fig. 4. ♀ Allotype (underside).
Fig. 5. Valves of ♂ genitalia, viewed at right angles to main surface, and aedeagus of lower, second, preparation.
Fig. 6. Armature of ♂ genitalia, with aedeagus removed, three pointed processes of uncus directed towards observer.
Figures of imagines 1.7 times natural size.
Figures of genitalia 21 times natural size.

the distal margin is not or is at the most barely dark-edged.)

Hindwing. Commencing from a little below vein 6, the space between the blue area and the distal-margin is largely, ferruginous coloured, instead of dark-brown to blackish as in *ficedula.* Inner-margin, anal-lobe and tail whitish as in the male of the present race.

Underside.

Forewing. Like that of male.

Hindwing. As in the male, with the same remarks applicable to the inner-marginal area, etc.

Length of forewing: 17-18.5 mm. (the former measurement, applying to allotype).

Antennae, in both sexes, with the clubbed portion beneath lighter (i.e., partly rather bright ferruginous as a rule) than in *ficedula,* and underside of thorax and abdomen as well as legs, considerably more white than in this race.

♂ Holotype, WESTERN CAPE PROVINCE: Doorn River, N. of Clanwillam, 2. x. 1970 (C.G.C.D.); British Museum Reg. No. Rh. 17288.

♀ Allotype, W. CAPE PROVINCE: data as holotype; British Museum Reg. No. Rh. 17289.

Paratypes in Coll. C.G.C.D. data as holotype, i.x.1970, 2 ♂♂ 1 ♀ (C.G.C.D.).

Paratypes in Coll. R.D.S., as holotype, 15.x.1967, 1 ♂.

Paratype in Coll. J. Brown, W. CAPE PROVINCE: Kuboes (Little Namaqualand), 19.xi.1962, 1 ♀ (H. D. Brown).

Paratypes in Coll. K. M. Pennington, W. CAPE PROVINCE: Soebatsfontein (Little Namaqualand), 18.xi.1946, 1 ♂ (K.M.P.); Garies (Little Namaqualand), 22.ix.1967, 1 ♀ (K.M.P.).

Paratypes in Coll. Mrs J. V. Sipser, as holotype, 1.x.1970, 1 ♂, 1 ♀ (J.V.S.), 1-2.x.1970, 1 ♂, 5 ♀♀ (C.G.C.D.).

Paratypes in Coll. W. Teare, as holotype, 19.xi.1970, 6 ♂♂, 11 ♀♀ (W. T.).

Paratypes in Coll. Transvaal Museum, W. CAPE PROVINCE: Brakfontein, Richtersveld (Little Namaqualand), 18.xi.1933, 1 ♂, 1 ♀ (G. van Son).

Some specimens of both sexes have the blue a little less extensive than in *ficedula,* but this is by no means a constant feature. In a few individuals the colouring may be a shade more violaceous than is usual in the latter race — with the majority apparently not showing any real difference in this respect.

The butterfly cannot be confused with *M. silenus deserticola,* although the females of the two races can be more alike than the males. An extension basad, of the ferruginous colouring of the upperside (this applying to the forewing only, in the male) is a feature of *deserticola,* and with the blue itself absent or simply consisting of a little scattered scaling in the hindwing of the female. Furthermore, this race lacks the dark border to the distal-margin, in the male

as well as the female; and, from a single specimen that has been seen, the inner-margin and the adjoining part of the hindwing are less whitish on both surfaces than in *penningtoni*. The underside of the latter race is usually but not invariably of a duller brownish tone than in *ficedula;* in the female paratype from Garies, caught by Mr Pennington, it is of a mustard-yellow colour. The distinctness of the transverse streaks on the underside of the wings is individually variable, while the marking at the end of the cell may be prominent in some specimens (at least in the hindwing) and in others barely visible—or in some cases not discernible at all, in the forewing anyway.

It is necessary to mention that a single male specimen which has been seen—of two obtained by Mr Pennington on 23rd November, 1946, at Otavi in the northern part of South West Africa and 250 miles from the coast—is close but not indentical to *penningtoni* from the N. W. Cape. In this specimen (in which the dark border on the upperside of the forewing is well developed) the blue is visibly a shade more violaceous and slightly less extensive than is usual in the males of *penningtoni,* while a broad inner-marginal zone as well as the anal-lobe and most of the tail of the hindwing are, on the upperside, decidedly darker and more like the corresponding parts in *ficedula.* Otavi, incidentally, has a higher annual rainfall than the localities in which *deserticola* has been found.

The male genitalia of *M. silenus silenus* have been fully described and figured by M. Stempffer in "The Genera of the African Lycaenidae (Lepidoptera: Rhopalocera)" (*Bull. Br. Mus. nat. Hist. (Ent.) Suppl.* **10** p. 111, 1967); and this author states "As I have pointed out (1943, *Ann. Soc ent. Fr.* **1942**: 117) the male genitalia of *M. ficedula* are identical with those of *M. silenus* and it is probable that *ficedula* is a subspecies of *silenus.*" In his figure which includes the valves, these organs are shown in immediate proximity to one another—the broad folded portion of each valve being clearly apparent in the lower part, of the drawing.

In the accompanying figures, the valves are not represented in an inverted position as in the drawing referred to above; and, since they are spread outwards in the preparations, with the main surface of the upper folded portion more or less on the same plane as the line of vision of the observer, an alternative view of the valves is given in our own paper.

The late Rev. D. P. Murray has given a good figure, in the lateral view, together with a short covering statement, of the male genitalia of *M. silenus ficedula,* in *J. ent. Soc. S. Afr.*, Vol. x. No. 2 (1948).

Mr W. H. Henning and his son Graham most obligingly furnished suitable male specimens of *ficedula,* from the Florida Hills Transvaal, just when these were required for a comparison of the genitalia with those of *penningtoni.* In the

present specimens of both these races which we have examined the aedeagus has in all cases been decidedly less robust than that of *M. silenus silenus* in Stempffer's very clear drawing in the publication cited. The valves of *penningtoni* have been relatively broader and the total length of the folded portion has been greater in relation to the length longitudinally of the rest of the valve, than in the above specimens of *ficedula*; and some other differences in detail have been noticed in the valves of the two races. Preparations of the genitalia of *penningtoni* were made from Mr Teare's captures, from the type locality.

Mr Pennington himself has stated, in a letter of 15th May, 1971:—"I first took two males at Soebatsfontein in 1946 when I camped against a large rock with a running fig along its face. I spotted them as I was having breakfast in November. I took two more a week later at Otavifontein a thousand miles north in S.W.A. From time to time since I have seen odd specimens in Namaqualand, but did not actually catch any till 1967 when they were fairly common round our camp in September under the Kamiesberg eight miles out of Garies". One of us (R.D.S.) gives his own experience of the butterfly in the paragraph which follows hereunder.

I was fortunate in taking a few specimens of this new race of *M. silenus* on the huge wild fig trees on the Doornrivier near Klaver, in October, 1967. I have so far not found them any closer to Cape Town, although the fig trees are evident further south. In addition, I have taken *M. silenus ficedula* in one spot at Mossel Bay on the ridge above the town. At the time of writing, these localities each represent the spots recorded closest to Cape Town where these two individual races are to be found.

As a result of the earlier experience of R. D.S., the locality in which the type-specimens of *penningtoni* were duly caught was visited by C. G. C. D. and Mrs J. V. Sipser with the express object of obtaining specimens (on 1st and 2nd October, 1970) which were found in fair numbers round the wild fig trees (*Ficus cordata* Thunberg) on which the butterfly obviously breeds. This insect does not seem to be as quick in its movements as *ficedula*. While habitually remaining about the same tree for long periods, specimens do on occasion fly from one tree to another, as was observed in the earlier part of the morning, and they may be seen feeding at low-growing flowers, including a deep pink species of *Mesembrianthemum* (*sens. lat.*), during this time of day.

It is believed that Dr Bernard Kettlewell took specimens of *deserticola* in S. W. Africa in 1952, judging by specimens that were shown to one of the writers (C. G. C. D.) by him at that time — in which case, these examples are now in the British Museum (N.H.), as Mr G. E. Tite referred in a fairly recent letter to specimens which answer to them.

The specific name of the *Ficus* tree with which this butterfly is associated was kindly furnished by Miss W. F. Barker,

Curator of the Compton Herbarium, Nationtal Botanic Gardens, Kirstenbosch, Cape—and who referred at the same time to the distribution of the tree, stating "It occurs from Clanwilliam northwards into S. W. Africa and Griqualand West."

As mentioned by Stempffer (1967), the caterpillars (or early stages) of *M. silenus* and *M. subornata* have been described by Farquharson and by Lamborn, in 1911 and 1913 respectively, and those of the former species by Jackson in 1937; while Murray has covered those of *M. silenus ficedula* in 1935, and Clark and Dickson (in *Life Histories of the South African Lycaenid Butterflies*) in 1971.

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Observations on British Butterflies in 1970

By Dr C. J. Luckens

The first free-flying butterfly of the season is always a special delight, and a worn *Aglais urticae* L. bravely sunning itself in the garden on March 26th was indeed a welcome herald of Spring. Apart from the release of a few more housebound *A. urticae* and a *Scoliopteryx libatrix* L. fluttering to get out into the weak sunlight during that week, we had to be content with this brief glimpse of Spring until well into April.

On April 9th, however, my father saw our first *Gonopteryx rhamni* L. in the garden and a few days later, just before our return to Glasgow, I myself saw one near Bolney.

We saw nothing of butterflies after that until the early Spring 'Whites' started flying in the Glasgow area on May 9th. I saw *Pieris rapae* L. around the University and a few *Pieris napi* L. and *A. urticae* near Kirkintilloch.

A few days later we went over to the moss near Kilmacolm. It was a perfect Spring day—curlews were nesting among the grass tufts, Cuckoos called in the surrounding copses, and at the entrance to the moss a pair of Stoats played to within a few feet of us. Yellowish heavily-marked females of *P. napi* were beginning to emerge (males were plentiful), and there were also a number of quite bright looking *A. urticae*.

I started to get very worried about my final exams. in Medicine after that, but in the lull between the end of the written papers and the start of the clinical exams, we took a few days off to stay with friends at Connel, near Oban. We were very fortunate in that our last three days there were gloriously sunny, and on June 1st we travelled up to Fort William in search of *Carterocephalus palaemon* Pall.

Carrying our small son, my wife and I quartered the ground for this elusive insect; but though we saw several *Callophrys*