The Lepidopterous Fauna of San Cataldo (Southern Italy).

Notes from a collecting trip in the late-summer 1928.

By

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The former monastery San Cataldo is situated in southern Italy, in the mountains between the gulf of Napoli and the gulf of Salerno, on a slope a few hundreds of meters above the idyllictown Amalfi. The old monastery was till few years ago a mere ruin, but the present owner, my compatriote Carl Wiinstedt, has restored it, and it is now used as a home-mansion for Danish people studying or collecting in the surrounding country.

I spent a month — from medio August to medio September 1928 — in San Cataldo, subvented by grants in aid from the institutions "San Cataldos Venner" and "Julius Skrikes Stiftelse", for which grants I beg the said institutions to receive my best thanks.

My object was to investigate the insect fauna — so far as the few weeks' stay would allow. My collections included all insect orders, and they contained ab. 3000 specimens, which are handed over to the Zoological Museum of the University of Copenhagen. The Lepidoptera of this mountain locality, so wonderful for a Danish lepidopterologist, had my special interest, and I suppose that I have caught nearly all the species of butterflies present during that season; the moths are however more chance finds, as sugaring, which yields so good results in Denmark, gave no result here, though I tried again and again. It looks as if Danish treacle with added acetic ether is of no interest to the Italian moths.

After my return to Denmark I have determined the collected Lepidoptera, and as to some species it proved to give informations not concording with the common records (as to time of appearance, number of generations etc.). The species are put down in the listbelow according to Spuler: Die Schmetterlinge Europas. Papilio podalirius L. Just on my first excursion in the mountains on August 17th I saw this fine swallow-tail sail around the thorn-bushes on the slope. On the following days I saw single specimens, most of them being rather much rubbed, and I saw it for the last time on August 28th. Fullgrown caterpillars were found August 20th to 24th feeding on thorn, and a caterpillar, which I kept living, pupated on August 31st, and imago came on March 9th 1929 (in Copenhagen).

Papilio machaon L. had a much longer flying-season than the preceding species. It was met with during my whole stay on San Cataldo, and seemed to be commoner later in September. I did not succeed in finding the caterpillar.

Pieris brassicae L. Common during the whole time. Young caterpillars in September on cabbage.

Pieris rapae L. Common the whole time.

Pieris ergane H.-G.? Perhaps, however, only a particular form of $rapae \ Q$. The spots on the fore wing are larger and nearer the outer margin, and the black colour on the apex is deeper and more extending than commonly met with in *rapae*. 4 specimens.

Pieris daplidice L. More singly occurring. More common later in September.

Colias hyale L. Present the whole time, but not common. $\vec{\bigcirc}$ more numerous than the \bigcirc .

Colias edusa L. Common. Fresh developed specimens caught during the whole time.

Colias edusa L. \bigcirc ab. helice Hb. 2 specimens caught on September 1st and 2nd.

Gonepteryx cleopatra L. Along the mountain paths and on thistle flowers in the chestnut wood towards San Catarina. Not uncommon, but rather singly met with. The last specimen met with, a \bigcirc , was caught on September 2nd.

Leptidia sinapis L gen. aest. diniensis B. (The two oblique bands on the under side of the hind wings quite missing). In great numbers in the chestnutwood, last time met with on August 31st.

Limenitis camilla Schiff. In the forest and on the paths, singly; I saw altogether 5 specimens, of which I caught 3. Last time met with on August 29th.

Polygonia egea Cr. Singly met with around San Cataldo, more common farther down in the valley, for instance at the way towards Amalfi. It took always rest on a wall or on recks. The last (rubbed) specimen was caught on September 1st. Pyrameis atalanta L. Three specimens were seen on the wing rolling around a ruin on the summit of Monte di Pontone in the afternoon sunshine on September 2nd. I succeeded in catching the 2 specimens.

Pyrameis cardui L. Common on the whole time on the slopes.

Melitaea didyma L. Rather common, but most often singly met with, on uncultivated slope ground and in the chestnut wood.

Melitaea athalia Rott. Two specimens caught in the chestnut wood on August 26th and September 1st.

Argynnis adippe F. ab. cleodoxa O. In and near the chestnut wood, especially on thistle flowers. The female in great numbers, the male singly. Last time met with on September 1st. — The principal form of the species was not seen.

Argynnis paphia L. At the forest, in the gardens, and along the paths. More common in September than in August.

Satyrus hermione L. This fine species was most commonly met with in the chestnut wood, where it alighted on the trunks. It was also seen flying along the paths, and in the mountains above the limit of the chestnut wood — 1200 m altitude. It occurred during my whole stay on San Cataldo; for instance I saw it in great numbers on September 20th.

Satyrus semele L. Larger and more briskly coloured than in Denmark (var. algirica Obth.?). Occurring in the forest together with *hermione*. Became somewhat more frequent in September along the mountain paths.

Satyrus statilinus Hfn. var. allionia F. Frequent during the whole time everywhere on the slopes.

Epinephele jurtina L. The female — most often in ab. hispulla Hb. — was common the whole time, especially at forests and copse woods. Of the male only 2 specimens were captured, on August 19th and 20th.

Epinephele ida Esp. Most often met with on uncultivated slopes. Seen for the last time September 2nd.

Coenonympha pamphilus L. gen. aest. lyllus Esp. Common during the whole time, especially in forests and copse woods.

Pararge egeria L. Only met with on shady places in the chestnut wood, gregarious. Met with till the beginning of Septr.

Pararge megaera L. Very common on the paths.

Pararge maera L. Rather common during the whole time. It was shy and difficult to capture.

Chrysophanus phlaeas L. v. gen. aest. eleus F. Now and then, but not frequent, from the end of August. Lampides bacticus L. Found for the first time August 29th down at Amalfi. Later on some specimens on the mountain along the paths.

Lampides telicanus Long. Likewise for the first time August 29th at Amalfi, and later on at some few occasions in the mountains.

Lycaena baton Bgstr. 1 specimen on August 20th.

Lycaena astrarche Bgstr. 1 specimen on August 19th at the forest.

Lycaena icarus Rott. Common during the whole time.

Lycaena meleager Esp. 3 $\bigcirc \bigcirc$ and 2 $\bigcirc \bigcirc$ August 18th -22nd.

Lycaena bellargus Rott. Common during the whole time.

Lycaena corydon Poda. Very common during the whole time. Cyaniris argiolus L. 4 specimens, from August 29th to

September 2nd.

Augiades silvanus Esp. 2 rubbed specimens in the chestnut wood in August.

Parnara nostrodamus F. Now and then; captured for the last time on September 1st.

Carcharodus alceae Esp. 2 rubbed specimens on August 24th and 28th.

Pygrus orbifer Hb. A single specimen on September 2nd. Pygrus sao Hb. 8 specimens captured August 20th to 30th. Scelothrix alveus Hb. In great numbers in August—

September.

Macroglossa stellatarum L. Very common, and in freshly developed specimens during my whole stay on San Cataldo. Young as well as full-grown caterpillars were met with on Galium growing in crevices in walls and rocks along the mountain paths. On September 1st I took a larva ready for pupation beneath a stone; it pupated on September 3rd, and imago came on September 22nd.

Deilephila lineata F. Mr. Wiinstedt kindly gave me a specimen of this species, formerly captured at the monastery.

Sphinx convolvuli L. A male was found between some stones at the outskirts of the chestnut wood on September 4th. (During my homeward route I took further a specimen, a female, in Rome on Piazza del Popolo on the wall at the ascend to Monte Pincio, on September 23rd).

Lasiocampa quercus L. Some half-grown larvae were taken in the chestnut wood in August, and a full-grown larva on the way towards Atrani in the beginning of September. August 28th I took a chrysalis in the garden of San Cataldo between some stones; imago, a male, came on September 3rd.

Lymantria dispar L. Some males in vivid flight between the stems in the chestnut wood on August 26th. I succeeded in capturing 4 specimens.

Agrotis orbona Hufn. A freshly developed specimen on blackberry on a mountain path on September 17th (second brood?).

Agrotis ypsilon Rott. A specimen between stones at a mountain path on September 4th.

Agrotis segetum Schiff. A specimen under a stone on Monte di Pontone on September 1st.

A specimen of a light-coloured species of Bryophila, seen on the wall of San Catalde on August 26th, escaped; possibly B. muralis Forst.

Callopistria latreillei Dup. A single specimen on September 1st.

Leucania l-album L. A single specimen taken on the wing in the sunshine along the mountain path on August 30th.

Stilbia anomala Hw. (perhaps however S. faillae Püng). A somewhat rubbed specimen on the high plateau at Porta di Canale, 1200 m altitude, on September 3d.

Eutelia adulatrix Hb. 2 specimens captured in the vicinity of the chestnut wood on August 28th and 31st.

Heliothis peltigera Schiff. Swarming in the sunshine around eryngo on uncultivated slopes. I captured 3 specimens, on August 23th and September 2nd.

Micra ostrina Hb. Captured August 24th on uncultivated slope.

Micra parva Hb. Swarming on uncultivated slopes. I captured some specimens, for instance on August 23d and 27th and September 18th (second brood?).

Metoponia vespertalis Hb. A freshly developed specimen on August 17th (second brood?).

Plusia gamma L. Common during the whole time, most frequently met with in September.

Plusia ni Hb. 2 specimens on August 21st and 29th.

Grammodes algira L. I found a dead specimen in the monastery on August 18th. Some days later another specimen was startled from black-berry along the path.

Apopestes spectrum Esp. One specimen in a corner of the cellar of San Cataldo in September 18th; two days later another specimen on just exactly the same place. Toxocampa craccae F. A male in the chestnut wood, on August 26th.

Herminia crinalis Tr. A single specimen on August 19th.

Hypena obsitalis Hb. Very common on dark places, in caverns, cellars, and out-houses, during my whole stay on San Cataldo.

Hypena lividalis Hb. Likewise common during the wholetime, but swarming or easily startled in the sun-shine in the garden of San Cataldo and along the mountain paths.

Eucrostes beryllaria Mn. Came to the light in the evening, August 16th, in the monastery.

Acidalia sodaliaria H. S. A single specimen on August 23d.

Acidalia virgularia Hb. var. australis Z. (or perhaps var. canteneraria Mill.) on August 20th and 28th.

Acidalia filicata Hb. Rather common in copse on uncultivated slopes, in August.

Acidalia imitaria Hb. Rather common nearly the whole time; met with for the last time on September 15th.

Rhodometra sacraria L. Rather frequently met with in the garden of San Cataldo and along the mountain paths, in August and September.

Analtis plagiata L. A specimen in the garden of San Cataldo on September 4th, and 2 specimens at San Catarina on the same day.

Larentia bilineata L. Rather common during the whole time, especially in the chestnut wood.

Chloroclystis (Eupithecia) rectangulata L. I took 3 specimens, on September 15th, 17th, and 20th (second generation?).

Gnophos mucidaria Hb. I have caught some specimens during the time: August 21st to September 18th, most often at rest, covered by some projection on the wall of the monastery.

Scodiona conspersaria F. A freshly developed specimen on September 20th, surely belonging to a second generation.

Chloëphora bicolorana Fuessl. A tiny larva on oak, on August 17th.

Callimorpha quadripunctaria Poda. Some specimens found on window-panes and behind window-shutters in the monastery. Also startled in some few cases along the mountain paths. My first specimen is from August 20th, my last specimen from September 16th, thus much later than the usual record (July).

Coscinia cribrum L. var. candida Cyr. (Nearly quite white). On several occasions met with along the mountain paths and in copse on the mountain, for the last time on August 30th. Lithosia caniola Hb. A single specimen on August 27th. Cochlidion limacodes Hufn. A full-grown larva in the chestnut wood at San Catarina, fallen into a pool, on September 19th.

Psychid cases. I took half a score of empty sacs on walls etc. along the mountain paths, as well as a single fresh sac (possibly belonging to Amicta febretta Boyer) on a Papilionaceous plant more upwards on the mountain slope. Two of the empty sacs looked as our Danish Fumea casta Pall., but were apparently somewhat larger (Fumea crassiorella Brd.?).

Apterona crenulella Brd. I took some of the remarkable, spiral cases on agaves.

Solenobia cases. I took 2 "triangular" Solenobiid cases in the chestnut wood in September (S. triquetrella F. R.?).

Aphomia sociella L. Came to the light in the monastery, August 16th and 24th.

Crambus lithargyrellus Hb.? In great numbers in August — September.

« Crambus latistrius Hw. v. vectifer Z. A single specimen on September 18th.

Crambus falsellus Schiff, On September 2nd.

Homoeosoma sinuellum F. On August 24th.

Ephestia figulilella Gregs. A single specimen in the monastery on September 20th.

Oxybia transversella Dup. On September 1st.

Salebria semirubella Sc. At the chestnut wood on August 21st and September 4th.

Salebria semirubella Sc. var. sanguinella Hb. In the same place on September 4th.

Endotricha flammealis Schiff. A single specimen on August 19th.

Hypsopygia costalis F. At the monastery on September 6th.

Pyralis farinalis L. In great numbers in the monastery. Seen for the last time on September 5th.

Ercta ornatalis Dup. Along the way towards Amalfi on August 29th.

Syllepta ruralis Sc. A single specimen on September 4th. Nomophila noctuella Schiff. Rather common in the garden of San Cataldo, in August and September.

Phlyctaenodes palealis Schiff. On August 21st and 23d. Mecyna polygonalis Hb. var. gilvata F. In numbers in the garden of San Cataldo, met with for the last time on September 6th. As Spuler writes that it is on the wing in June, these specimens must surely do represent a second generation.

Metasia corsicalis Dup. Now and then seen on the walls of the monastery between August 18th and September 17th.

Pionea ferrugalis Hb. On August 16th and 21st.

Pyrausta nubilalis Hb. On August 21st.

Pyrausta cespitalis Schiff. Some specimens during the time August 31st to September 15th.

Pyrausta sanguinalis L. Along the way towards Amalfi on August 29th.

Pyrausta purpuralis L. Some few specimens in the same place, as the preceding species.

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