Additional Notes on the Lepidopterous Fauna of San Cataldo (Southern Italy).

Notes from a collecting trip in the summer of 1936.1)

By J. G. Worm-Hansen.

Renewed grants from the institutions "San Cataldo's Venner" and "Julius Skrikes Stiftelse" enabled me — for the third time — to stay for a month, from June 17th to July 17th 1936, in San Cataldo.

For these grants I beg the institutions to accept my most cordial thanks.

By this third collecting both sugaring and light catching gave results.

Before I started for the trip, Engineer N. Wolff of Copenhagen, gave me some fermented plums, and this "delicacy" mixed with treacle and pure spirit highly attracted the Italian moths.— But light catching gave still better results. By the kind assistance of Miss Dora Wiinstedt, Manageress of the Monastery San Cataldo, I made an arrangement— in the garden of the Monastery— with an electric light which in the evenings attracted moths (as well as beetles, ant lion flies, etc.).

As previously I collected insects of all orders, and this time I could hand over to the Zoological Museum of Copenhagen, about 3000 specimens of Arthropods; naturally I captured few specimens only of the species which I had hitherto collected.

In the list below — arranged in conformity to Spuler: "Die Schmetterlinge Europas", I have included all species found of Lepidoptera up to Pyralidae inclusively. A number of species, particularly butterflies, are also enumerated in my two former lists, but since the time of capture is different, the statements in the list may give some further information as to when the species

See Entom. Medd. XVI 1930 p. 425—432 and XIX 1935 p. 277 -285.

are on the wing. As regards the moths, it will be seen that this list is considerably marked by the light catching.

Prof. Rebel of Vienna has kindly determined some of the collected Pyralids, for which courtesy I beg to extend my best thanks to him.

Papilio podalirius L. Specimens from June 19th. Rather common in July.

Papilio machaon L. Common. Newly hatched specimens from July 12th.

Pieris brassicae L. Common.

Pieris rapae L. Common.

Pieris ergane H.-G. Rather common.

Pieris napi L. Only a few specimens.

Pieris daplidice L. Common.

Colias hyale L. A single 3, July 16th.

Colias edusa F. Common. Q ab. helice Hb. on June 27th. Gonepteryx cleopatra L. Rather common.

Leptidia sinapis L. (also gen. aest. diniensis B.). Common. Polygonia egea Ch. Common. A chrysalis on June 30th, hatched on July 10th.

Pyrameis atalanta L. Rather common, June.

Pyrameis cardui L. Very common. A caterpillar was found on June 30th, pupated, and imago appeared on July 16th.

Melitaea phoebe Knoch, ab. melanina Bonap. Cenni. One specimen on June 28th in Paestum.

Melitaea didyma L. Common.

Melitaea athalia Rott. Very common.

Argynnis daphne Schiff. Only met with on the high plateau, at Porta di canale, 1200 m. altitude, on July 16th. Some specimens.

Argynnis latonia L. 1 specimen on the same high plateau on July 16th.

Argynnis aglaia L. Occurring together with daphne on the high plateau on July 16th. 2 specimens were captured.

Argynnis adippe L., ab. cleodoxa O. 1 of on July 10th.

Argynnis paphia L. Singly in the chestnut wood.

Argynnis pandora Schiff. 1 ♀ in copse wood on July 14th.

Melanargia galathea L. Common, last time met with on July 16th.

Melanargia arge Sulz. Rather common in June. The last specimen met with on July 6th (rubbed).

Satyrus hermione L. In and near the chestnut wood. I saw it for the first time on July 2nd.

Satyrus semele L. Occurring in the forest together with hermione.

Epinephele jurtina L. Common.

Epinephele ida Esp. Common.

Coenonympha arcania L. Present the whole time.

Coenonympha pamphilus L. gen. aest. lyllus Esp. Very common.

Pararge egeria L. Common on shady places in the chestnut woods.

Pararge megaera L. In June.

Pararge maera L. Singly. A newly hatched specimen on July 12th.

Thecla ilicis Esp. Common in copse woods in June; rubbed in July.

Chrysophanus alciphron Rott. Rubbed, June 27th.

Chrysophanus phlaeas L. Singly, in July.

Lampides baeticus L. One specimen in the garden of Cimbrone on June 30th.

Lycaena argus L. Common, especially numerous on the high plateau at Porta di Canale on July 16th. A specimen, much like *L. cleobis* Bremi on July 14th (see the remarks in Entom. Medd. XIX p. 280).

Lycaena astrarche Brgstr. Rubbed on June 20th. A newly hatched specimen on July 12th.

Lycaena icarus Rott. Very common.

Lycaena meleager Esp. In the woods of Minuto, from July 8th.

Lycaena escheri Hb. 3 specimens on July 10th and 12th.

Lycaena bellargus Rott. Only 1 specimen, Q, July 7th.

Lycaena corydon Poda. 1 of on July 17th.

Lycaena dolus Hb. 1 ♂ on July 15th. Lycaena minima Fuessl. Rubbed on July 7th.

Lycaena semiargus Rott. A few specimens, rubbed, on June 27th.

Lycaena orion L. On July 7th and 10th, 3 specimens.

Cyaniris argiolus L. On June 23rd and July 7th, rubbed.

Adopaea thaumas Hufn. Rather common from June 19th to 27th.

Adopaea actaeon Esp. Rather common during the whole time.

Augiades sylvanus Esp. Rather common.

Carcharodus alceae Esp. On June 17th and 24th.

Scelothrix alveus Hb. On June 23rd and July 7th, rubbed.

Macroglossa stellatarum L. Now and then, but not numerous, rubbed. Young as well as full-grown caterpillars on Galium.

Deilephila euphorbiae L. Young caterpillars on *Euphorbia* in June, full-grown in the beginning of July. Imagines (v. paralias Nich.) came on July 25th, 26th, 27th and 29th (in Copenhagen).

Smerinthus tiliae L. A tiny larva on chestnut on July 10th. Cerura vinula L. Small larvae on Salix in the garden of San Cataldo in June and July. 1 demerged on April 11th 1937 in Copenhagen.

Ochrostigma melagona Bkh. At light in the evening, July 16th.

Phalera bucephala L. 1 of on chestnut on June 29th. A full-grown larva, fallen into a pool, on July 6th.

Lymantria dispar L. Larvae numerous on various trees and bushes. Emerged from August 22nd to September 4th in Copenhagen.

Calocasia (Demas) coryli L. At light, June 26th.

Aeronycta aceris L. At sugar from June 26th to July 15th.

Acronycta psi L. At sugar, July 6th.

Agrotis putris L. At light, June 25th and July 17th.

Agrotis ypsilon Rott. At light, July 6th.

Agrotis segetum Sch. Mag. sc. Sv. Gisle Larsson brought me one specimen, captured on June 1st.

Agrotis saucia Hb. At sugar, June 30th and July 10th. At light, June 26th.

Agrotis saucia Hb. ab. margaritosa Hw. At light from June 26th to July 17th. Several specimens.

Mamestra calberlai Stgr. (Prof. Rebel det.). 3 specimens at sugar, June 26th and 30th.

Mamestra chrysozona B. At light, July 13th.

Mamestra serena F. At light, July 6th.

Bryophila muralis Fr. At sugar, June 29th.

Dipterygia scabriuscula L. At sugar, July 6th and 12th. Chloantha hyperici F. At light, July 11th.

Callopistria purpureofasciata Pill. At the outskirts of the chestnut wood on July 27th, swarming in the sunshine.

Callopistria latreillei Dup. At light, July 8th and 13th. At sugar, July 15th.

Brotolomia meticulosa L. At sugar, June 26th.

Leucania scirpi Dup. At light, July 10th.

Leucania L-album L. At light from July 7th to 17th.

Caradrina exigua H. 2 specimens at light, July 11th.

Calophasia platyptera Esp. At light, June 25th.

Cucullia verbasei L. Full-grown caterpillars on the leaves of *Verbascum* in July. A specimen emerged on April 16th 1937 in Copenhagen.

Cucullia blattariae Esp. Caterpillars numerous on the flowers of *Scrophularia* in June and July. 4 specimens emerged from March 23rd to April 11th 1937 in Copenhagen.

Cucullia tanaceti Schiff. Caterpillars on the flowers of Santolina in June. Imagines appeared on July 29th and August 19th in Copenhagen.

Cucullia chamomillae Shiff. A full-grown larva on the flower of Santolina on June 28th.

Eutelia adulatrix Hb. At light, July 17th.

Heliothis dipsacea L. 3 specimens at light, July 6th and 11th. Heliothis peltigera Schiff. On uncultivated slopes, June 19th, ubbed.

Xanthodes malvae Esp. At light, July 11th.

Prothymia viridaria Cl. On the wing on uncultivated mountain slopes, July 11th. At light, July 15th.

Habrostola tripartita Hufn. At light, July 17th.

Plusia chalcites Esp. At light on June 23rd and July 7th. Plusia gamma L. Common at light. A full-grown larva on Santolina, July 1st, emerged on July 14th.

Plusia ni Hb. 1 specimen at light, July 17th.

Euclidia mi Cl. Some larvae captured with net in June.

Grammodes algira L. At sugar, June 29th and July 3rd. At light, July 7th, 14th and 17th.

Catocala conversa Esp. Imago at sugar on July 10th. Some small larvae on oak-bushes.

Apopestes spectrum Esp. At sugar, July 13th and 14th. Toxocampa craccae F. At light, June 25th and 26th. On the wing in copse wood on July 15th and 17th.

Herminia derivalis Hb. At light, July 11th. On the wing in the chestnut wood on July 14th.

Hypena obsitalis Hb. Common on dark places, out-houses etc.; also at light and sugar.

Hypena lividalis Hb. At light and sugar.

Aplasta ononaria Fuessl. On Monte di Pontone, July 12th. Pseudoterpna coronillaria Hb. Startled on the mountain slope, a male on June 6th and a female on July 10th.

Euchloris smaragdaria F. On the wing on mountain slopes, June 24th and July 2nd. 6 specimens at light from June 22nd to July 15th.

Eucrostes indigenata Vill. At light, July 7th. Nemoria pulmentaria Gn. At light, July 17th.

A Chrysoprosaria?-species (at light, June 24th) is not yet determined.

Acidalia consanguinaria Ld. On mountain slope July 11th. At light from July 9th.

Acidalia moniliata F. In copse wood, July 4th.

Acidalia contiguaria Hb. At light, July 13th.

Acidalia virgularia Hb. ab. australis Z. Very common.

Acidalia ostrinata Hb. At light, July 10th.

Acidalia politata Hb. At light, July 10th and 13th.

Acidalia filicata Hb. On mountain slope on June 18th.

Acidalia rusticata F. At light, July 7th. 1 specimen in Pompeji, July 5th.

Acidalia dilutaria Hb. In the chestnut wood, June 29th.

Acidalia degeneraria Hb. On mountain slope, June 27th.

Acidalia deversaria H. S. On mountain slopes from June 27th to July 10th, numerous.

Acidalia marginepunctata Goeze. At light from June 26th. Acidalia submutata Fr. At light on June 25th and 26th.

Acidalia luridata Z. Some specimens at light from June 26th to July 17th.

Acidalia coenosaria Ld.? (perhaps a small var. of A. luridata). At light, July 16th and 17th.

Acidalia imitaria Hb. At light, June 30th and July 17th. Acidalia ornata Sc. By Paestum, June 20th.

Codonia pupillaria Hb. At light, rather common, July.

Codonia punctaria L. At light, July 6th and 12th.

Codonia linearia Hb. In the chestnut wood on June 17th. Codonia subpunctaria Z. At light, June 26th, July 12th and 13th.

Rhodostrophia calabraria Z. Very common on uncultivated mountain slopes in June, rubbed in July.

Ortholitha plumbaria F. A single specimen at the outskirts of the chestnut wood on June 21st.

Ortholitha moeniata Sc. In the chestnut wood on July 12th and 13th (very large specimens).

Anaitis plagiata L. At light, July 7th and 12th.

Anaitis efformata Gn. A specimen in Pompeji on July 5th. Larentia fluctuata L. At light, common.

Larentia ferrugata Cl. On mountain slope, June 25th, at light, July 6th and 8th.

Larentia fluviata Hb. Several specimens at light from July 13th.

Larentia galiata Hb. Common at light.

Larentia bilineata L. In chestnut woods, common in June.

Asthena candidata Schiff. At light, July 17th.

Tephroclystia oblongata Thnbg. At light, June 25th and July 7th.

Tephroclystia breviculata Donz. At light, July 15th.

Tephroclystia alliaria Stgr. At ligth, July 8th.

Tephroclystia semigraphata Brd. At light, July 7th.

Tephroclystia pumilata Hb. At light, common.

Tephroclystia? 3 specimens are not yet determined.

Phibalapteryx vitalbata Schiff. At light, June 30th and July 12th.

Abraxas adustata Schiff. At ligth, July 8th.

Stegania trimaculata Vill. Some specimens at light from July 11th.

Deilinia pusaria L. At the outskirts of the chestnut wood, June 22nd and July 14th.

Opisthograptis luteolata L. Two full-grown larvae (one green, the other grey-brown) on *Prunus* on July 3rd. One Imago emerged August 6th (a second generation).

Biston hirtarius Cl. Small larvae in the chestnut wood, numerous on *Alnus* in June, fullgrown in July. A male emerged on March 3rd 1937 (in Copenhagen).

Hemerophila japygiaria Costa. At light, June 25th.

Hemerophila abruptaria Thnbg. At light, July 17th.

Boarmia gemmaria Brahm. On the stem of a tree etc. 4 specimens from June 18th to July 17th. One sp. emerged on July 17th.

Boarmia umbraria Hb. One specimen on the stem of a walnut tree, June 18th.

Boarmia consortaria F. At light, July 17th. One fullgrown larva on *Prunus*, July 3rd, emerged in Copenhagen, August 7th.

Boarmia selenaria Schiff. At light, July 16th and 17th.

Pachycnemia hippocastanaria Hb. At light, June 24th, 25th and July 2nd.

Gnophos respersaria Hb. At light, July 6th.

Gnophos variegata Dup. Numerous at light during my whole stay.

Thamnonoma contaminaria Hb. ♂♂ on light, June 30th and July 14th.

Scodonia conspersaria F. On mountain slopes, June 29th. Perconia strigillaria Hb. On slopes, ♂ and ♀, June 24th. Sarrothripus revayanus Sc. At light, July 16th and 17th, larva on oak, July 10th.

Nycteola falsalis H. S. At light, July 13th.

Earias chlorana L. At light, July 13th, 14th and 17th.

Hylophila prasinana L. At light, July 17th.

Syntomis phegea L. From June 19th, very common.

Dysauxes punctata F. In copse woods, June 21st. At light, June 27th.

Spilosoma menthastri Esp. At light, June 25th. A fullgrown larva on June 23rd, emerged in Copenhagen, April 2nd 1937.

Phragmatobia placida Friv. Rather common at light in July. One specimen emerged on July 16th.

Arctia villica L. At light in June.

Callimorpha quadripunctaria Poda. In copse woods, from July 11th.

Lithosia caniola Hb. Rather common at light, June and July. Anthrocera rubicunda Hb. In the chestnut wood (800 m. altitude), more specimens from June 24th to July 14th.

Anthrocera scabiosae Scheven. var. neapolitana Calb. In and near woods, some specimens from June 20th to July 16th.

Anthrocera punctum O. In numbers; the most common of all the Anthrocera-species.

Anthrocera meliloti Esp. var. teriolensis Sprr. 2 specimens on June 26th and July 16th.

Anthrocera filipendulae L. From June 17th.

Anthrocera transalpina Esp. Common from June 17th, rubbed on July 13th.

Anthrocera transalpina Esp. v. sorrentina Stgr. Some specimens in July.

Anthrocera transalpina Esp. v. calabria Calb. In chestnut woods, rather common in June-July. Single specimens had hindwings quite black.

The specimens of sorrentina and calabria differ much from that of transalpina in flight and behavior (resemble A. stoechadis Bkh.).

Anthrocera oxytropis Boisd. On June 19th and 21st, rubbed. Rhagades turatii Bartel. Some specimens in June.

(Another Rhagades-species, captured in June-July, is not yet determined).

Pachytelia villosella O. Some empty sacs on walls etc.

Fumea crassiorella L. Two empty sacs.

Aphomia sociella L. At light, July 14th.

Crambus craterellus Sc. Common on slopes, June.

Ematheudes punctella Fr. At Cimbrone, June 30th. At light at San Cataldo, July 10th and 17th.

Homoeosoma sinuellum F. In copse woods and at light in June.

Homoeosoma nimbellum Z. On slopes, June 23rd, at light in July.

Plodia interpunctella Hb. At light, July 13th.

Ephestia ragonotella Mill. (Prof. Rebel det.). On light from June 22nd; in July very common.

Oxybia transversella Dup. At Monte di Pontone, July 12th. Zaphodia convolutella Hb. Some sp. at light, July 13th.

Etiella zinckenella Tr. On slopes in June, at light July 4th and 10th.

Salebria semirubella Sc. v. sanguinella Hb. On the slopes as well as at light, June, July.

Amphithrix sublineatella Stgr. (Prof. Rebel det.). At light, July 7th.

Acrobasis consociella Hb. At light, July 17th.

Myelois umbratella Tr. (Prof. Rebel det.). At light, July 12th. Endotricha flammealis Schiff. Common at light, especially in July.

Hypsopygia costalis F. At light, common during my whole stav.

Terapne obsoletalis Mn. (Prof. Rebel det.). At light, June 26th and July 7th.

Herculia glaucinalis L. 6 specimens at light from June 26th to July 15th.

Stenia punctalis Schiff. On slopes, June.

Stenia sp. (Possibly a lighter form of *punctalis*) on June 21st. Psammotis hyalinatis Hb. On slopes, June, and July 3rd. Scoparia pyrenaealis Dup. (Prof. Rebel det). At light,

June 29th, July 6th and 17th. Scoparia frequentella Stt. (Prof. Rebel det.). On slopes,

June 23rd. At light July 7th and 11th. Syllepta ruralis Sc. In copse wood, June 22nd.

Glyphodes unionalis Hb. From June 25th, common at light. Nomophila noctuella Schiff. At light, June 29th.

Phlyctaenodes palealis Schiff. Common during the whole time, especially at light.

Diasemia ramburialis Dup. At light, July 17th. Mecyna polygonalis Hb. On slopes and at light. Cynaeda dentalis Schiff. On slopes and at light, June.

Melasia ophialis Tr. 6 specimens in June.

Pionea testacealis Z. At light, July 17th.

Pionea fulvalis Hb. At light, June and July.

Pionea ferrugalis Hb. At light, very common during my whole stay.

Pyrausta flavalis Schiff. In and near the chestnut woods, 3 specimens in June.

Pyrausta nubilalis Hb. On mountain slopes on June 23rd and July 16th (99). 00 at light on July 14th and 16th.

Pyrausta asinalis Hb. (Prof. Rebel det.). At light. One specimen with large, black spots on June 25th. One without black spots on July 12th.

Pyrausta cespitalis Schiff. Common on the slopes; also

at light.

Pyrausta sanguinalis L. Some specimens at light in July. Pyrausta porphyralis Schiff. In copse wood on June 23rd. Pyrausta purpuralis L. On the slopes and at light.

Pyrausta aurata Sc. On slopes, July 11th.

Dypessa ulula Bkh. At light, June 22nd. (Mag. sc. Sv. Gisle Larsson leg.).

Zeuzera pyrina L. Some specimens at light in June, July, all $\circlearrowleft \circlearrowleft$.

Trochilium typhiiforme Bkh. Mr. Gisle Larsson brought me one specimen on June 23rd.

Hepialus humuli L.? One empty pupa on June 24th.