

RECENT LITERATURE ON LEPIDOPTERA

B. SYSTEMATICS AND NOMENCLATURE

- Alberti, Burchard, "Die Deutung der Rösel-schen *Pyrgus*-Figur von 1746 (Lep. Hesperiidæ)" [in German]. *Nachrbl. Bayer. Ent.*, vol. 1: pp. 65-67. 15 Sept. 1952. *Pyrgus cirsii* Rbr.
- Alberti, Burchard, "Die Deutung der Urabbildungen von *Pyrgus carthami* Hübner (Lep. Hesperiidæ)" [in German]. *Nachrbl. Bayer. Ent.*, vol. 2: pp. 37-40. 15 May 1953. In Hübner, *Sammlung europäischer Schmetterlinge*, Pap., t. 143 fig. 720 (726 ex err.) & 723, *Pyrgus carthami* Hb.; fig. 721 & 722, *P. cinaræ* Rbr. The type of the first species is probably from S. Russia; *möschleri* HS. is its aberration. [N.O.]
- Boursin, Ch., "Eine neue Gattung der Unterfamilie Zenobiinæ aus dem Syr-Darja-Gebiet" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 34: pp. 158-160, 1 pl. 31 Dec. 1949. Describes as new *MESOPHUS*, (type *Agrotis contrita*); figures ♂ genitalia, compared with those of *Turicina*. [P.B.]
- Boursin, Ch., "Prof. Dr. M. Draudt, Beiträge zur Kenntnis der Agrotiden-Fauna Chinas. Aus dem Ausbeuten Dr. H. Hönes. (Beitrag zur Fauna Sinica)". *Mitt. d. Münchn. Ent. Ges.*, XL, 1950, pp. 1-174, Taf. I-XVIII" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 37: pp. 134-136. 15 Nov. 1952. Discusses the paper by Draudt and synonymizes some species. Discusses position of some other species and proposes *Blepharita draudti* n.n. for *Meganephria adusta* Drdt. (*nom. præoc.*). [N.O.]
- Boursin, Ch., "Zwei neue *Crypbia* Hb. (*Bryophila*) - Arten aus dem vorderasiatisch-mediterranen Faunenkreis. (Beiträge zur Kenntnis der 'Agrotidæ-Trifinæ' LV)" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 37: pp. 152-155, 1 pl. 15 Dec. 1952. Describes as new *C. microphysa* (Prodromos, Cyprus, 1200 m.); *C. amseli* (Jericho, Palestine); figures adults and ♂ genitalia of these and related spp. [P.B.]
- Bruun, Henrik, & Max von Schantz, "Till kännedom om *Brenthis improba* Btl. ssp. *improbula* Bryk (Lepid.)" [in Swedish, English summary]. *Notul. Ent.*, vol. 29: pp. 83-89, 1 pl., 3 figs., 1 map. March 1950. Demonstrates the differences in the genitalia between ssp. *improbula* and the nominate ssp. New localities for ssp. *improbula* in Finnish Lapland are recorded. Probable food plant *Salix herbacea*. The eggs are laid singly in the lichen cover. [W.H.]
- Chiarelli de Gahan, Angelina, "El genero *Ariathisa* y su representante en la Argentina" [in Spanish]. *Comun. Inst. Nac. Cien. Nat. B. Aires, Cien. Zool.*, vol. 2: pp. 47-53, 1 pl., 10 figs. 1951. Transfers *A. nigrifrons* from *Proxenus*; redescribes sp., with figures of adults and structural details. [P.B.]
- Cleu, H., "*Satyrus actæa aigoualensis* Foulquier dans les Cévennes médianes" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 171-172, 3 figs. "Jan./Feb." [31 May] 1952. Redescribes and figures subspecies.
- Koch, Manfred, "*Horisme* Hb. (*Phibalapteryx* Stph.) *corticata* Tr. ssp. *bretschneideri* n. ssp." [in German]. *Zeitschr. Wiener Ent. Ges.*, vol. 33: pp. 43-44. 1 Oct. 1948. Type locality Dresden.
- Kozhanchikov, I. V., *Fauna SSSR. Novaya Seriya. 42. Lepidoptera. XIII. Orgyidæ*. [in Russian]. 581 pp. Izv. Akad. Nauk SSSR, Moscow, 1950. [Not seen.]
- de Laever, E., "*Cænonympha iphis gallica* Rüttimeyer" [in French]. *Rev. Franç. Lépid.*, vol. 13: p. 128, 1 pl. "Sept./Oct." [28 Dec.] 1951. Redescribes this race and figures a series. [P.B.]
- Le Charles, L., "Contribution à l'étude des *Zygènes gallica-mana-erebus*" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 287-297, 5 pls. "Oct./Nov./Dec. 1952" [25 March 1953]. Describes as new: *H. s. bierica* (Forêt de Fontainebleau); *H. s. aliosicola* (Gironde); *H. s. lemovica* (Haute-Vienne); *H. s. celtica* (Causse Noir, Camprieu); *H. s. antipolitanus* (Alpes-Maritimes); *H. s. pseudalliona* (Le Var); *H. s. pradensis* (Vernet-les-Bains). Type locality given only for *H. s. celtica*. Redescribes other races; figures series of several. [P.B.]
- Le Marchand, S., "Quel est le véritable nom de *Neurothaumasia burdigalensis* Le Md. (Tineidæ) avec description d'une nouvelle espèce de *Tinea*" [in French]. *Rev. Franç. Lépid.*, vol. 14: pp. 41-45, 2 figs. 1953. *N. burdigalensis* is synonym of *Tinea ankerella*. A new species *Tinea manni* (without locality!) is described. [P.V.]

- Lempke, B. J., "Catalogus der Nederlandse Macrolepidoptera XI" [in Dutch, with English descriptions of new subsp. and forms, and notes]. *Tijdschr. Ent.*, vol. 95: pp. 197-319, 8 figs. 20 Dec. 1952. In this last part of the catalogue concludes Geometridæ and describes as new *Peribatodes secundaria occidentaria* (pp. 233-234, fig. 53), *Aspitates ochrearia parvularia* (p. 265, fig. 55), and *Perconia strigillaria fuscosignaria* (p. 265, fig. 56), all from Holland; describes numerous new color forms; discusses history of the fauna of Netherland Lepidoptera (with English summary); gives addenda and errata to previous parts and an index to the whole work. Types of new forms not designated. [A.D.]
- Lempke, B. J., "Catalogus der Nederlandse Macrolepidoptera. (Eerste supplement)" [in Dutch, with English discussions and descriptions]. *Tijdschr. Ent.*, vol. 96: pp. 239-305, 3 pls., figs. 30 Dec. 1953. Treats Hesperiidæ, Papilionidæ, and some Pieridæ. Describes as new *Aporia crataegi transiens* (Holland); describes numerous new forms. [A.D.]
- de Lesse, H., "Contribution à l'étude du genre *Erebia* (7^e note). *E. sthenno* Grasl. est-il une bonne espèce" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 217-219, 1 map. "March/April" [25 July] 1952. Species doubtfully distinct from *E. pandrose*. [P.B.]
- Lingonblad, Birger, "Neue Schmetterlingsformen aus Lappland" [in German]. *Notul. Ent.*, vol. 26: pp. 69-71. Feb. 1947. Describes as new *Clossiana selene hyperborea* (northernmost Finnish Lapland), *Hesperia centaurea grisea* (Finnish Lapland). Describes and names (!) aberrations of *Notodonta ziczac* and *Anomogyna gelida*. [W.H.]
- Lingonblad, Birger, "Neue Schmetterlingsformen" [in German]. *Notul. Ent.*, vol. 29: pp. 79-82, 1 pl. March 1950. Describes as new *Erebia ligea petsamoënsis* (Petsamo in Russian Lapland), *Cænonympha tullia muonioënsis* (Muonio area in Finnish Lapland). Describes and names aberrations of *Pieris napi*, *Palimpsestis ocularis*, *Coscinia cribraria*. [W.H.]
- Löberbauer, Rudolf, "*Anomogyna rhætica* Stgr. ssp. *norica* nova subspecies" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 37: pp. 165-168, 1 pl. 15 Dec. 1952. Type locality Höllengebirge, Austria. [P.B.]
- Pactl, Jiri, "Rectification of the nomenclature of *Colias* and *Ochlodes* (Lepidoptera)." *Ent. News*, vol. 62: pp. 305-307. 1951. Considers *Colias* feminine, *Ochlodes* neuter, in gender. [J.T.]
- Pearson, Henry R., "Contribuição ao conhecimento do gênero *Mimallio* Huebner, 1820 (Lepidoptera, Mimallonidæ)" [in Portuguese]. *Rev. Brasil. Biol.*, vol. 11: pp. 315-332, 57 figs. Sept. 1951. Describes as new: *M. neomilia* (Salesopolis, São Paulo, Brazil); *M. almeidai* (Angra dos Reis, Est. do Rio, Brazil). Redescribes *M. amilia* and *M. hector* and redefines genus. Figures adults and genitalia. [P.B.]
- Pekarsky, Paul, "*Parnassius apollo* L. in den Karpaten" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 38: pp. 106-110. 30 April 1953. Critical review of a paper by Issekutz (*Ann. Hist.-Nat. Mus. Hung.* vol. 2) on the same subject, correcting application of subspecies names. [P.B.]
- Petersen, B., "The relations between *Pieris napi* L. and *Pieris bryoniae* Ochs." *Trans. 9th Int. Congr. Ent.*, vol. 1: pp. 83-96, 2 figs. March 1953. Field observations in the Alps show that these two species are different biological species, isolated from each other by space (altitude) and time (of occurrence); possess also different foodplants; males have different odors. [A.D.]
- Pring, R. W., & Patrick Roche, "The butterflies of Nigera. VI. Nymphalidæ: Nymphalinae: *Cymothoe*." *Nigerian Field.* vol. 17: pp. 53-66, 3 pls. Apr. 1952. Descriptions and keys to the 34 spp., 12 are figured. [P.B.]
- Rebel, H., "Neue Heteroceren aus Aegypten" [in German]. *Zeitschr. Wiener Ent. Ges.*, vol. 32: pp. 49-60. 10 May 1948. Describes as new: (Lymantriidæ) *Orygia ochrodorsalis* (Gebel Elba, Wadi Chab), *Polymona rubescens* [sic!] (Gebel Elba, Wadi Cansisrob); (Agrotidæ) *Agrotis (Euxoa) pictifascia elbaënsis* (Gebel Elba, Wadi Aideb and Wadi Cansisrob), *Metopoceras eutychna* (St. Kattine), *Caradrina (Athetis) apicimaculata* (Gebel Elba, Wadi Cansisrob), *Cucullia macara* (Gebel Elba, Cansisrob), *Tarache seminigra* (Gebel Elba, Wadi Aideb), *T. griseascens* (Gebel Elba, Wadi Chab), *Ozarba cervina* (Gebel Elba, Wadi Aideb), *O. capreolana* (Gebel Elba, Mersa Halaib), *O. elaphina* (Gebel Elba, Wadi Aideb), *O. fuscascens* (Gebel Elba, Wadi Aideb and Cansisrob), *Eublemma tomentalis* (Gebel Elba, Wadi Aideb), *E. amydroxana* (Gebel Elba, Wadi Cansisrob and Wadi Chab), *PYRALOIDES*, *P. spodia* (Gebel Elba, Wadi Aideb), *Pseudocalpe anubis* (Gebel Elba, Wadi Aideb), *Rhynchodontodes sagittalis* (Gebel Elba, Wadi Raddet); (Geometridæ)

- Glossotrophia sinaica* (Wadi Feran), *Cosymbia elbaensis* (Gebel Elba, Wadi Hekwal), *Traminda graciliata* (Gebel Elba, Wadi Aideb), *Perizoma poliosana* (Gebel Elba, Wadi Cansisrob), *Zamarada latilimbata* (Gebel Elba, Wadi Aideb); (Nolidæ) *Nola priesneri* (Meadi, Cairo). No figures. [P.B.]
- Varin, G., "Contribution à l'étude des Satyridæ de France, de l'Espagne et de l'Afrique du Nord. Les races d'*Arethusana arethus* Schiffermüller (*sic!*) (*Satyrus*, *Eumenis* ou *Nytha arethus*)" [in French]. *Rev. Franç. Lépid.*, vol. 14: pp. 77-84. "1953" [1954]. Study of the races of the satyrid *A. arethus* in Spain, North Africa, and chiefly in France. The author describes three new races in France: *A. a. allobrogicus* (Isère area; no locality given for the paratypes); *A. a. calciphila* (Gard area); and *A. a. cerdanica* (E. Pyrenees; no exact locality given for the types). The presentation of this paper is rather defective. The name "race" and the names of the authors are in italics; the abbreviations for the same publication vary; the name Fruhstorfer is written in different ways; the citation "Rebel et Thierry, p. 80" is completely incomprehensible for the entomologist without knowledge of the literature of the Moroccan fauna (it is really the important paper of Zerny (1935, *Mém. Soc. Sci. Nat. Maroc*, no. 42: 163 pp., 2 pls. - not 1933 as it is written). Such a paper should never be published. [P.V.]
- Varin, G., "Contribution à l'étude des Satyridæ (Lépidoptères). Les races d'*Hipparchia fidia* L. d'Afrique du Nord" [in French]. *Bull. Soc. Sci. Nat. Maroc*, vol. 33: pp. 69-74. 1954. Studies of the populations of the satyrid *H. fidia* in North Africa. Two new subspecies are described: *H. f. kandarica* (Djebel Abbad), and *H. f. Beni M'Guildi* (*sic!* - such a name should not be accepted) (Ain-Leuh). The author's name Austant is really Austaut. Holotypes in author's collection. [P.V.]
- Warren, B. C. S., "A new species of *Erebia* from S. E. Tibet (Lep. Satyridæ)". *Entomologist*, vol. 85: pp. 17-18. Jan. 1952. Describes as new *E. ludlowi* (Kongobo Do-Re). [P.B.]
- Warren, B. C. S., "*Pyrgus reverdini* (Obth.): a European species." *Entomologist*, vol. 85: pp. 39-41. Feb. 1952. Describes as new *P. r. scotti* (type locality no specified, probably Sylkynjärvi, Finland). Species previously known only from Szechuan, China. [P.B.]
- Wyatt, Colin W., "Einige neue Tagfalterformen aus Marokko" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 37: pp. 173-176, 4 pls. 15 Dec. 1952. Describes as new *Pieris manni baroldi* (Taghzelt Pass, middle Atlas, 1900m.); *Satyrus abdelkader taghzelti* (same, 1900-2100m.); *S. priouri kebira* (same, 2200m.); *S. atlantis colini* (same, 2200m.); *S. arethus aksouali* (Tachdirt, High Atlas, 2500m.); *Cænonympha vaucheri annoceuri* (Annoceur, middle Atlas, 1600m.); figures adults of these and some related ssp. [P.B.]
- Wyatt, Colin W., "Einige neue Tagfalterrassen aus Spanien" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 37: pp. 204-207, 1 pl. 31 Dec. 1952. Describes as new *Plebeius ramburi novarredondæ* (Novarredonda, Sierra de Gredos, Avila Province); *P. r. elsa* (Riano, Leon Province); *Cænonympha leander trevincae* (Peña Trevinca, Orense Province). Figures adults of new ssp. and of *P. r. ramburi*; *P. r. chapmani*, and *C. l. iphioides*. [P.B.]

C. MORPHOLOGY AND CYTOLOGY

- Gray, P. H. H., "Correlations between "pupal volume" and wing-radius and weight in butterflies." *Lepid. News*, vol. 7: pp. 47-48. 27 July 1953.
- Heikertinger, Franz, "Das Problem der 'Totalzeichnung' auf den Schmetterlingsflügeln" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 34: pp. 85-89, 147-153; vol. 35: pp. 68-80; 2 pls., 9 figs. 15 July, 31 Dec. 1949, 1 June 1950. Shows that markings of fore and hind wings tend to form a harmonious pattern when adjusted to the proper angle, which corresponds to some normal position of the living animal. Denies that this pattern is necessarily protective, since the same is true of the dorsal pattern in species in which the dorsal side is concealed at rest. [P.B.]
- Kiriakoff, S. G., "Les organes tympaniques des lépidoptères comme caractère systématique et phylogénétique" [in French, English summary]. *Lepid. News*, vol. 6: pp. 7-12, 5 figs. 8 Aug. 1952.
- de Lesse, Hubert, "Quelques formules chromosomiques chez les Lycenidæ (Lépidoptères Rhopalocères)" [in French]. *C. R. Acad. Sci.*, vol. 235: pp. 1692-1694, 3 figs. 1952. Records haploid chromosome numbers in 6 spp.; the distinctness of the sibling spp. *Lysandra albicans* and *L. coridon* is supported. [P.B.]

- de Lesse, H., "Formules chromosomiques de *Boloria aquilonaris* Stichel, *B. pales* D. et Schiff., *B. napæa* Hoffm. et quelques autres Lépidoptères Rhopalocères" [in French]. *Rev. Franç. Lépid.*, vol. 14: pp. 24-26, 1 pl., 5 figs. 1953. Gives the chromosome number of *B. aquilonaris* (n=30), *B. pales* (n=30), *B. napæa* (n=31), *Clossiana titania* (n=31), *Glaucopsyche melanops* (n=23), *Kanetisa (Brintesia) circe* (n=29), *Hyponephele lycaon* (n=29), *Reverdinus (Lavatheria) lavatherea* (n=30). [P.V.]
- de Lesse, H., "Formules chrosomiques nouvelles chez les Lycænidae (Lepid. Rhopal.)" [in French]. *C. R. Acad. Sci.*, vol. 238: pp. 514-516, 1 fig. 1954. New chromosome numbers of 4 spp. of Lycænidae: *Lysandra nivescens* (n=190-191; highest number known in the animal kingdom); *L. argester* (n=131-151; specimens from Sierra Nevada in Spain have a lower number than those from other, distant, localities in Spain or in France); *L. dolus* (n=124-125); *L. riparti* (n=90). [P.V.]
- Maeki, Kodo, & Sajiro Makino, "Chromosome numbers of some Japanese Rhopalocera." *Lepid. News*, vol. 7: pp. 36-38. 29 July 1953.
- Nakao, Yoshio, "Action of irradiated cytoplasm on untreated chromosomes of the silkworm." *Nature*, vol. 172: pp. 625-626. 3 Oct. 1953. Evidence that irradiated egg cytoplasm is responsible for chromosomal deficiencies in sperm nucleus. [P.B.]
- Nüesch, Hans, "The morphology of the thorax of *Telea polyphemus* (Lepidoptera). I. Skeleton and muscles." *Journ. Morph.*, vol. 93: pp. 589-604, 2 pls. Nov. 1953. A careful, well illustrated account. [P.B.]
- Razowski, Józef, "Anomalien bei Schmetterlingen" [in German]. *Zeits. Wiener Ent. Ges.*, vol. 38: pp. 70-71. 1 April 1953. Records and figures *Anthrocera angelice* with distorted pattern on one forewing, and *Nymphalis antiopa* imago with head of larva. [P.B.]
- Schvanvich, B. N., "Stereomorphism in the cryptic coloring of Lepidoptera Heterocera and certain vertebrates" [in Russian]. *Trudy Leningradskoe Obsch. Estestvois.*, vol. 71: pp. 286-305. 1952. [Not seen].
- Suomalainen, Esko, "The kinetochore and the bivalent structure in the Lepidoptera." *Hereditas*, vol. 39: pp. 88-96, 11 figs. 2 March 1953. Presents evidence, from a study of *Cidaria* spp., that kinetochore is diffuse (permitting fragmentation or fusion of chromosomes and differing chromosome numbers in closely related spp. without meiotic irregularities); that chiasmata are formed in meiosis; and that the reduction division is the first meiotic division in ♂♂ but the second in ♀♀. [P.B.]
- Takami, Takeo, "Movement of yolk cells in the Silkworm (*Bombyx mori* L.)." *Science*, vol. 119: pp. 161-162, 4 figs. 29 Jan. 1954. Active movement in egg.
- Tchou-Su & Chang-Ko, "Destinée des spermatozoïdes surnuméraires dans la fécondation polyspermeique chez l'oeuf du sphinx (*Parus colligata* Walker) et l'autonomie des centres cinétiques)" [in French]. *Exptl. Cell Res.*, suppl. 1: pp. 529-532. 1949. Reports degeneration of supernumerary sperm in fertilized egg at metaphase stage, apparently because of low ration of nuclear to cytoplasmic material. [P.B.]
- Tchou-Su & Chang-Ko, "Dissociation expérimentale des rythmes cinétiques dans la mitose amphimixique de l'oeuf récemment fécondé de *Bombyx mori*" [in French]. *Exptl. Cell Res.*, suppl. 1: pp. 533-535. 1949. Reports independent behavior of nuclear centers in fertilized egg following cyanide blocking of normal mitosis. [P.B.]
- Vinogradova, V. N., "Particularities in the venation of the rear wings in the family Pyralidae (Lepidoptera)" [in Russian]. *Ent. Obozr.*, vol. 31: pp. 495-499. 1951. [Not seen.]
- Weber, Hermann, "Morphologie, Histologie und Entwicklungsgeschichte der Articulaten. Gleichzeitig ein Bericht über Fortschritte in der Methodik der Articulatenmorphologie" [in German]. *Fortschr. Zool.*, N.F., vol. 9: pp. 18-231, 24 figs. 1952. A comprehensive and critical review paper, covering annelids and arthropods and attempting to summarize morphological studies published since 1940. Deals with some work on the Lepidoptera specifically, and contains a great deal of material of fundamental importance to entomologists. [P.B.]
- Wohlfahrt, Th. A., "Geschlechtsdimorphismus am Flügelgeäder von *Strymon spini* Schiff. (Lep., Rhopalocera)" [in German]. *Nachrbl. Bayer. Ent.*, vol. 2: pp. 83-84, 4 figs. 15 Nov. 1953. "Berichtigung". *Ibid.*, p. 96: 15 Dec. 1953. Sexual dimorphism in the wing venation. [N.O.]
- Wolsky, Alexander, "The growth and differentiation of reticular cells in the compound eye of the Silkworm (*Bombyx mori* L.)." *Exptl. Cell Res.*, suppl. 1: pp. 549-554, 5 figs. 1949. Reports presence of a differentiation center in the eye anlage; damage to this results in failure of entire eye to develop normally, while damage to other parts of anlage produce only local defects. [P.B.]