

RECENT LITERATURE ON LEPIDOPTERA

Under this heading are listed each month papers on Lepidoptera from all the scientific journals which are accessible to us and our cooperating abstractors. It is hoped that eventually our coverage of the world's literature will be virtually complete. It is intended that every paper and book published after 1946 will be included. In the first five volumes of the *Lep. News* 1722 papers and books were listed. Abstracts give all new subspecies and higher categories, with type localities and generotypes. Papers of only local interest are merely listed. Papers devoted entirely to economic aspects will be omitted. Reprints are solicited from all publishing members; the many regularly received are gratefully acknowledged. Initials of cooperating abstractors are as follows: [P.B.] - P. F. BELLINGER; [A.D.] - A. DIAKONOFF; [L.G.] - L. A. GOZMANY; [G.dL.] - G. DE LATTIN; [C.R.] - C. L. REMINGTON; [T.S.] - T. SHIRÔZU. A complete set of these pages, for clipping and filing, may be obtained for Vol. 4 and Vol. 5 and a subscription for Vol. 6 for \$ 0.50 per volume.

~~A. GENERAL WORKS~~

1. Clark, Austin H. and Leila F., "The butterflies of Virginia." *Smiths. Misc. Coll.*, vol. 116, no. 7: vii + 239 pp., 31 pls. 20 Dec. 1951. Discusses distribution and lists local and seasonal occurrence. Figures and keys to all species. [P.B.]
2. Peterson, Alvah, *Larvae of insects. An introduction to nearctic species. Part I. Lepidoptera and Hymenoptera.* 315 pp., 84 pls. Columbus. 1948. Keys to orders for nymphs, naiads, larvae, pupae; keys to families for larvae of Lepidoptera and Hymenoptera, with summaries of family structure and habits. Extensively illustrated. See review in *Lep. News*, vol. 3, p. 37. [P.B.]
3. Remington, C. L., "The orders of insects." *Lep. News*, vol. 3: pp. 45-47, 1 fig. "Apr-May" [July] 1949.

~~B. SYSTEMATICS~~

4. Beirne, Bryan P., "Subspeciation in European Lepidoptera." *Lep. News*, vol. 5: pp. 27-28. 1951.
5. Bernardi, G., "Notes sur la nomenclature des Lycaenidae (Lep. Rhopalocera)" [In French]. *Bull. Soc. Ent. France*, vol. 56: p. 30. Feb. 1951. Proposes *Lysandra pulchella* nom. nov. for *L. pulchra* Sheljuzko (homonym). Notes on subspecific names of three European species. [P.B.]
6. Bernardi, "La détermination des *Maculinea* français" [In French]. *Rev. Franc. Lépid.*, vol. 13: pp. 16-18, 5 figs. "Jan.-Feb." [31 Mar.] 1951. Key to 4 spp. Distributions given. [P.B.]
7. Boursin, Ch., "Eine seit 175 Jahren verkannte europäische *Derthisa*-Art" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 44-51. 30 June 1951. Distinguishes *D. trimacula* and *D. glaucina* and discusses taxonomic history, distribution, and parallel variation of these long-confused spp. [P.B.]
8. Box, Harold E., "New species and records of *Diatraea* Guild. from northern Venezuela." *Bull. Ent. Res.*, vol. 42: pp. 379-398, 1 pl., 5 figs. Aug. 1951. Describes as new: *D. busckella setariae* (Yuma, Carabobo Prov.); *D. andina* (near Cordero, Tachira Prov.); *D. pittieri* (Rancho Grande); *D. silvicola* (Apure); also 2 'forms'. Raises *D. rosa* to specific rank. Figures adults and genitalia of all. Gives food plants and distribution records for 11 spp. [P.B.]
9. Bradley, J. D., "A new species of *Labdia* (Lepidoptera: Cosmopterigidae) from India, hitherto erroneously identified as *Labdia promacha* (Meyrick)." *Ann. Mag. Nat. Hist.*, 12th ser., vol. 4: pp. 510-513, 1 pl. May 1951. Describes as new *L. fletcherella* (Pusa, Bengal). [P.B.]

10. Brown, F. Martin, "Simple statistics for the taxonomist. *Lep. News*, vol. 5: pp. 4-6, 43-45, 64-66, 112-120. 1951.
11. Bryk, Felix, "Über den Habitus der Satyride, *Pararge achine* (Scop.), in Schweden (Lepidoptera)" [In German]. *Ent. Tidskr.*, vol. 72: pp. 29-36, 2 figs. 15 Apr. 1951. Describes as new *P. a. suecica* (Sweden); *P. a. rambringi* (Gotland); also 1 'form'. No type localities. [P.B.]
12. Caruel, Marcel, "Quelle est la forme typique de *P. achine* Scopoli?" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 145-147. "Sept.-Oct. 1949" [25 Jan. 1950].
13. Cary, Margaret M., "Subspeciation among sphingid moths of the West Indies." *Lep. News*, vol. 5: pp. 20-23, 1 fig. 1951.
14. Collenette, C. L., "A new *Redoa* from Celebes (Lep., Lymantriidae)." *Entomologist*, vol. 84: pp. 17-18, 2 figs. Jan. 1951. Describes as new *R. listrophora*; figures ♂ genitalia of the new sp. and of the related *R. marginalis*. [P.B.]
15. Collenette, C. L., "Some new species of Lymantriidae in the British Museum (Natural History)." *Ann. Mag. Nat. Hist.*, ser. 12, vol. 4: pp. 1026-1040, 1 pl. Oct. 1951. Describes as new: *Leucoma sericea tafa* (Mt. Tafa, Papua); *Redoa crocophala* (mts. south of Wenchow, China); *Kanchia dinawa tafa* (Mt. Tafa, Papua); *K. stibiessa* (New Ireland); *Cispia ochrophaea polygramma* (Khasi Hills, India); *Euproctis catapasta* (Darjeeling, India); *E. stenosacca* (Khasi Hills); *E. walshae* (Samarinda, Borneo); *Parakanchia cyclops* (Sabron, Cyclops Mts., Dutch New Guinea); *Lymantria kanara* (Kanara, India); *Dasychira buinensis* (Buin, Bougainville, Solomon Is.); *Mardara yunnana* (Yunnan). Figures adults. Proposes *Euproctis chlorozona* n. n. for *E. leucozona* Collenette, 15 Oct. 1938 (*nec* Collenette, 3 Oct. 1938). Discusses *Psilochira* and gives key to 5 spp.; *Imaida* a synonym. Other notes on synonymy and distribution. [P.B.]
16. Fletcher, D. S., "Eupithecia studies. - I (Lepidoptera: Geometridae)." *Ann. Mag. Nat. Hist.*, ser. 12, vol. 4: 1009-1026, 29 figs. Oct. 1951. Describes as new: *E. dohertyi fumata* (Onyanga, Mt. Cameroon); *E. d. fulvata* (Namwamba Valley, Ruwenzori Range, Uganda); *E. fuscata* (Mobuku Valley, Ruwenzori Range, Uganda); *E. personata* (Batsileo, Madagascar); *E. steeleae* (Mann's Quelle, Mt. Cameroon); *E. nigropolata* (Namwamba Valley, Ruwenzori Range, Uganda); *E. salti* (Shiva Plateau, Mt. Kilimanjaro, Tanganyika); *E. edwardsi* (Namwamba Valley, Ruwenzori Range, Uganda); *E. ochrata* (Mt. Sabinio, Kigezi Dist., Uganda); *E. pseudoabbreviata* (Harar, Abyssinia); *E. tabacata* (Kitale, Kenya); *E. angulata* (Harar, Abyssinia); *E. multispinata* (Onyanga, Mt. Cameroon); *E. cinnamomata* (Orange Free State). Raises *E. dohertyi*, *nigribasis* and *immensa* to specific rank; synonymizes *E. gonypetes* under *E. tricuspis* and *E. thessa* under *E. brachptera*. Figures ♂ and ♀ genitalia of most. [P.B.]
17. Forster, Walter, "Die Riodiniden der Ausbeuten Dr. Hönes aus China" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 62-66, 2 pls. 30 June 1951. Describes as new: *Polycæna chauchowensis pallidior* (Likiang, Yunnan); *P. lua minor* (Batang, Tibet); *Dodona boenei* (Likiang, Yunan). Records and comments on 8 other spp. N. spp. and 2 others figured. [P.B.]
18. Klimesch, Josef, "Über zwei neue Arten aus der *Coleophora millefolii* Z.-Gruppe. *Coleophora franzi* spec. nov. und *C. repentis* spec. nov. (Lep., Coleophoridae)" [In German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 33-38, 6 figs. 30 June 1947. Type locality and food plant for both: Gamsgrube, Grossglockner region, on *Gypsophila repens*. Genitalia figured. [P.B.]
19. Klimesch, J., "*Nepticula* (*Levarchama*) *ortneri* spec. nov. (Lep., Nepticulidae)" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 66-70, 6 figs. 30 June 1947. Type locality Leopoldsberg, Austria. Figures ♂ genitalia of n. sp. and *N. cryptella*. [P.B.]
20. Klimesch, Josef, "*Stagmatophora alypella* spec. nova (Lep., Momphidae)" [In German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 72-74, 1 pl. 30 June 1947. Food plant *Globularia alpum*. Type locality Bordighera, Italy (?) [P.B.]
21. Klimesch, J., "Zur Kenntnis der Genitalmorphologie einiger *Nepticula*-Arten (Lep., Nepticulidae)" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 4-9, 7 figs. 15 Apr. 1951. Describes and figures ♂ genitalia of *N. spinosissima*, *N. zermatensis*, *N. doryciniella*, and discusses position of spp. [P.B.]

22. Klimesch, J., "Über Microlepidopteren des Trausteingebietes in Oberösterreich" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 101-117, 27 figs. 1 Aug. 1951. Describes as new *Phthorimaea diffluella bellidiastris*. Annotated list of about 100 spp., with figures of genitalia and mines of some. [P.B.]
23. Klots, Alexander B., "Holarctic butterfly speciation and subspeciation, especially in North America." *Lep. News*, vol. 5: pp. 24-27, 1 fig. 1951.
24. de Lattin, Gustaf, "Studien über die Gattung *Crambus* F. I. Über *Cr. myellus* Hb. und die ihn nächst verwandten Arten" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 89-101, 1 pl., 7 figs. 1 Aug. 1951 Describes as new: *C. myellus melinellus* (Terlan, S. Tyrol); *C. permutatellus kaisilai* (Vuorikylä, Finland). Discusses morphology, synonymy, and distribution of these spp. and *C. osthelderi*; figures adults and ♂ and ♀ genitalia. [P.B.]
25. Le Charles, L., "Contribution à l'étude des *Zygaena*" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 178-180. "Nov.-Dec. 1949" [26 Apr. 1950]. Describes as new *Z. filipendulae centrogalliae* (Seine-et-Oise); *Z. f. fischeri* (upper Rhine); *Z. f. armoricensis* (Illeet-Vilaine); *Z. f. calxensis* (Peyreleau); *Z. f. altpyreneaica* (Pyrenees); also one melanic 'form'. The proposal of these names, without figures or adequate descriptions and without specification of type specimens or type localities, in a genus as badly overworked as *Zygaena*, is regrettable. [P.B.]
26. Lempke, B. J., "Catalogus der Nederlandsche Macro-lepidoptera X" [In Dutch, English summary and notes]. *Tijdschr. Ent.*, vol. 94: pp. 227-320, 5 figs. 22 Aug. 1951. Contains Geometridae (continued): Larentiinae (finished), Boarmiinae, divided into 5 tribes. [A.D.]
27. Obratzov, N., "*Pammene* (*Hemarosia*) *tomiana* Z. und andere ihr ähnliche Arten (Lepidoptera, Tortricidae)" [In German]. *Tijdschr. Ent.*, vol. 94: pp. 321-326, 2 figs. 22 Aug. 1951. Discusses *P. (H.) obscurana*, *ravulana*, and *tomiana*, with synonymy and literature, and figures ♂ genitalia of first and last spp. [A.D.]
28. Remington, Charles L., "Geographic subspeciation in the Lepidoptera. I. Introduction: a general outline of subspeciation." *Lep. News*, vol. 5: pp. 17-20, 5 figs. 1951.
29. Remington, C. L., "The components of an adequate paper describing a new species." *Lep. News*, vol. 5: p. 46. 1951.
30. Salmon, J. T., "New species and records of Lepidoptera from Three Kings Islands, New Zealand." *Rec. Auckland Inst. Mus.*, vol. 3: pp. 291-311, 1 pl. 20 Dec. 1948. Describes as new: *Porina unimaculata* (Hepialidae); *Heliothibes bilineata* (Glyphipterygidae); *Lysiphragma argentaria* (Tineidae); *Ctenopseustis obliquana distincta* (Tortricidae); specimens figured. Records 3 other spp. (Pyralidae, Geometridae, Noctuidae). [P.B.]
31. Scholz, Rudolf, "*Hybernia aurantiaria* Esp. subsp. *lariciaria* nov. subsp. (Lepidopt., Geometr.)" [In German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 113-120, 1 pl. 30 June 1947. Separates larch-feeding race as ssp. No type locality. Discusses biology and variation, naming and figuring 15 'forms'. [P.B.]
32. Sieder, Leo, "*Psychidea bombycella* Schiff. und ihre Rassen" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 33-44, 1 pl., 8 figs. 30 June 1951. Describes as new: *P. b. collina*, *P. b. altimontana*, *P. b. silvicolella*, all from east Alpine region; distribution listed and mapped, but type localities not specified. Discusses other European ssp. and gives a table for their separation. [P.B.]
33. Stempffer, Henri, "Contribution à l'étude des Lycaenidae du Liberia" [In French]. *Bull. Inst. Franc. Afrique Noir*, vol. 12: pp. 402-407, 3 figs. Apr. 1950. Describes as new *Oboronina liberiana* (Glofaké, Liberia); figures adult and ♂ genitalia. Lists 28 other spp., with Liberian localities and general distribution. [P.B.]
34. Tilden, J. W., "A new subspecies of *Mitoura siva* Edwards." *Bull. So. Cal. Acad. Sci.*, vol. 50: pp. 96-98, 1 pl. "May-Aug. [15 Oct.] 1951. Describes as new *M. s. mansfieldi* (7 mi west of Simmler, San Luis Obispo Co., Calif.) [P.B.]
35. Viette, Pierre E. L., "The Noctuidae Catocalinae from New Caledonia and the New Hebrides (Lepidoptera)." *Pacific Science*, vol. 4: pp. 139-157, 13 figures. Apr. 1950. Key to 9 genera; redescribes the 13 spp., figuring genitalia. [P.B.]

8pt

C. MORPHOLOGY

36. Barth, Rudolf, "Die männlichen Duftorgane von *Papilio polystictus* Btlr. und *proneus* Hbn. (Lepidoptera), zugleich ein Beitrag zum feineren Bau der Duftschuppen" [In German]. *Revista Ent.*, vol. 21: pp. 513-535, 16 figs. [30] Dec. 1950. Description of gross and fine structure of the scent organ in the anal fold of ♂ of these 2 spp. [P.B.]
37. Bayard, André, "Les caractéristiques morphologiques des *Procris* français" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 289-317, 34 figs. "Sept.-Oct." 10 [Dec.] 1950. Describes, with good figures, the ♂ and ♀ genitalia of the 11 French spp. ♂ antennae are also figured, and the ranges and known food plants are listed. [P.B.]
38. Berger, L.-A., "Genitalia d'Hemitheinae" [In French]. *Lambillionea*, vol. 49: pp. 86-87, 1 pl. 25 Aug. 1949. Figures ♂ genitalia of 6 Belgian spp. [P.B.]
39. Bourgogne, Jean, "Morphologie externe et appareil genital d'un exemplaire gynandromorphe de *Zygaena achilleae* Esp. (Lepidopteres Zygaenidae)" [In French]. *Bull. Soc. Zool. France*, vol. 74: pp. 67-74, 1 fig. 1949. Description of a bilateral gynandromorph, with ♂ external genitalia and internal organs indeterminate. [P.B.]
- # 40. Bourgogne, J., "L'appareil genital femelle de quelques Hepialidae (Lepidopteres)" [In French]. *Bull. Soc. Zool. France*, vol. 74: pp. 284-291, 1 pl. 1949. Discusses general morphology in the family, and describes and figures ♀ genitalia in 4 spp. [P.B.]
41. Bros de Puechredon, E., "Une nouvelle localité en Suisse de *Caradrina* O. (*Paradrina* Brsn) *Wulschlegeli* Pglr." [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 208-211, 1 pl. "Jan.-Feb." [12 July] 1950. Figures ♂ genitalia of *C. Wulschlegeli* and *C. selini*. [P.B.]
42. Bryk, F., "Geographische und individuelle Variabilität der Sphragisbildungen (Lepidoptera: Parnassiidae)" [In German]. *Ent. Tidskr.*, vol. 71: pp. 230-234, 1 pl. 31 Dec. 1950. Describes and compares sphragis in spp. of *Eukoraimus*. [P.B.]

8pt

D. VARIATION, AND GENETICS, CYTOLOGY

43. Alessandri, A., "Sur la capture de *Limenitis sibilla* L. forme ind. *nigrina* Weymer" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 172-173, 4 figs. "Nov.-Dec. 1949" [26 Apr. 1950].
44. Bretschneider, R., "Neue Geometriden-Formen in Sachsen" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 21-22, 15 Apr. 1951. Describes and names color mutants of *Pseudoterpna pruinata*, *Cosymbia purata*, *Anticollis sparsata*. [P.B.]
45. Bryk, Felix, "Über einen aberrativen Schmetterling mit einem für eine andersartige Unterfamilie typischen Merkmal (Acraeinae)" [In German]. *Zeits. Lepidopt.*, vol. 1: pp. 41-44, 1 fig. 1 May 1950. Describes and names an aberration of *Actinote erinome* with the cell of the hind wing open. [P.B.]
46. Burmann, Karl, "Neue Formen von *Larentia scripturata* Hb. ssp. *dolomitana* Habich aus Nordtirol (Lepidoptera, Geometridae)" [In German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 60-61, 1 pl. 30 June 1951. Names 2 'forms'; figures variation. [P.B.]
47. Caspari, Ernst, "Pigment formation in the eye of *Ephestia* and its genic determination." *Zoologica*, vol. 35: p. 17. 17 Apr. 1950. Abstract only.
48. Doets, C., "Notes on Lepidoptera, 1949." *Ent. Berichten*, vol. 13: pp. 163-167, 9 figs. 1 Nov. 1950. Collecting notes on Microlepidoptera in Holland. 17 spp. discussed of which 6 are new for the Dutch fauna. Describes and names aberrations of *Crambus paludellus* and *Opostega auritella*. [A.D.]
49. Dufrane, Abel, "A propos d'*Araschnia levana* L." [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 94-95. "Mar.-Apr." [4 Oct.] 1949. Names 2 aberrations. [P.B.]

E. DISTRIBUTION AND PHENOLOGY 8pt

50. Cary, Margaret M., "Distribution of Sphingidae (Lepidoptera: Heterocera) in the Antillean-Caribbean region." *Trans. Amer. Ent. Soc.*, vol. 77: pp. 63-129, 2 figs. 31 Aug. 1951. Discusses sphingid faunas of the West Indies and adjacent continental regions and their probable origins. [P.B.]
51. Christiansson, Gösta, "En för landet ny *Cucullia*-art" [In Swedish]. *Ent. Tidskr.*, vol. 72: pp. 74-75, 1 fig. 15 Apr. 1951. *C. fraudatrix*, new to Sweden.
52. Clark, Austin H., "Butterflies of the Marshall Islands." *Proc. Ent. Soc. Wash.*, vol. 53: pp. 43-44. Feb. 1951. *Precis villida bismarkiana*, *Hypolimnas bolina jaluia* and *Badamia exclamatonis* are the only spp. definitely recorded. [P.B.]
53. Cleu, H., "Rhopalocères des Cévennes" [In French]. *Rev. Franc. Lépid.*, vol. 11: pp. 349-354, 1 pl. Sept. 1948. Notes on *Parnassius apollo*, *Erebia* spp., *Argynnis amathusia*, *Araschnia levana*. [P.B.]
54. Cockayne, E. A., "*Diarsia florida* Schmidt (Lep. Agrotinae): a Species New to Britain." *Entomologist*, vol. ~~82~~ 83: pp. 173-174. Aug. 1950. rom
55. Dufrane, Abel, "Notes lepidopterologiques" [In French]. *Lambillionea*, vol. 50: pp. 46-47. 25 June 1950. Notes on some spp. of Nolinae and of *Hydraecia*. [P.B.]
56. Esaki, Teiso, "A zoogeographical consideration of the insect fauna in the Pacific Islands." *Proc. VIII Int. Ent. Congr.*, pp. 373-379. 1950. Concludes that this area belongs to the Melanesian and Polynesian sub-regions of the Oriental, and not of the Australian, region. [P.B.]
57. Fletcher, T. Bainbrigg, "*Antigastra catalaunalis* in Gloucestershire." *Ent. Rec.* vol. ~~62~~ 63: pp. 88-89. Oct. 1950. rom
58. Freeman, T. N., "The Arctic Lepidoptera of Baker Lake, North West Territories." *Lep. News*, vol. 2: pp. 63-65, 1 fig. June 1948.
59. Smith, Denis, "Butterflies in Corsica." *Entomologist*, vol. ~~82~~ 83: pp. 207-208. Sept. 1950. rom
60. Stroud, Clyde P., "A survey of the insects of White Sands National Monument, Tularosa Basin, New Mexico." *Amer. Midl. Nat.*, vol. 44: pp. 659-677, 2 figs. "Nov. 1950" [12 Feb. 1951]. Lists 20 spp. of Lepidoptera. [P.B.]
61. Svensson, Ingvar, "Lepidopterologiska iakttagelser II" [In Swedish, English summary]. *Ent. Tidskr.*, vol. ~~71~~ 72: pp. 46-54. 28 May 1950. New records for Sweden and its provinces. [P.B.]
62. Swezey, O. H., "*Tinea despecta* Meyrick, a hitherto unrecorded case-moth in Hawaii (Lepidoptera: Tineidae)." *Proc. Hawaiian Ent. Soc.*, vol. 14: pp. 313-314. Mar. 1951. Hawaiian records, notes on early stages. Records 1 parasite. [P.B.]
63. de la Torre y Callejas, Salvador Luis, "A list supplementing Bates' 'Butterflies of Cuba'." *Lep. News*, vol. 3: p. 65. "June" [Oct.] 1949. d/s
64. de Toulgoet, H., "Une noctuelle nouvelle pour la faune française: *Spodoptera cilium* Gn." [In French]. *Lambillionea*, vol. 49: p. 124. 25 Dec. 1949. rom
65. Toxopeus, L. J., "Over de Pionier-Fauna van Anak Krakatau, met Enige Bescheuwingen over het Ontstaan van de Krakatau-Fauna" [In Dutch, English summary]. *Chronica Naturae*, vol. ~~706~~ 707: pp. 27-34, 3 figs. Jan. 1950. Notes on the reestablishment of fauna on this volcano which erupted in 1939; a special study of 2 spp. of *Papilio* is included. [P.B.]
66. Toxopeus, L. J., "The geographical principles of species evolution in New Guinea. A Study on Parallelisms in geological and lepidopterological development." *Proc. VIII Int. Ent. Congr.*, pp. 508-522, 7 figs., 3 maps. 1950. Regards the New Guinea fauna as chiefly endemic in origin, with Asiatic components in the western parts. The so-called 'Australian' component is native, and representatives of this fauna in Australia are 'Papuan'; dispersal of species between the two areas was probably mediated by a Pleistocene land bridge on the Merauke-Aru Ridge. New Guinea was probably an archipelago until very recently; combination of originally isolated faunas may account for the present extraordinary diversity. The Snow Mts. in New Guinea are extremely recent geologically and probably still rising; butterflies are very scarce above timberline and not remarkably different from lowland forms, showing not enough time has elapsed to permit development of a characteristic alpine fauna. [P.B.]

~~F. BIOLOGY~~ *8pt* AND EARLY STAGES

67. MacKay, Margaret R., "Descriptions of larvae of several species of the genus *Zale* (Lepidoptera: Phalaenidae)." *Canad. Ent.*, vol. 83: pp. 245-261, 9 pls. Oct. 1951. Describes larvae of *Z. duplicata largera*, *belata*, *undularis*, *minerea norda*, and *lineosa*, and gives a key to these spp. Figures larvae and adults, and structural details of former. [P.B.]
68. Madsen, Harold F., and Arthur D. Borden, "The Eye-Spotted Bud Moth on Prune in California." *Journ. Econ. Ent.*, vol. 42: pp. 915-920, 2 figs. Dec. 1949. Biology and control of *Spilonota ocellana*. [P.B.]
69. Maran, Josef, "Quelques expériences d'infestation d'insectes par le champignon *Cordyceps sphingum* Sacc." [In Czech, French summary]. *Acta Soc. Ent. Cechosloveniae*, vol. 45: pp. 113-119. 1 Oct. 1948. Fungus, cultured from *Sphinx pinastri*, will also attack larvae of *S. ligustri* and larvae and adults of *Ephestia kübniella*. [P.B.]
- nom* 70. Matthes, Ernst, "Der Einfluss der Fortpflanzung auf die Lebensdauer eines Schmetterlings (*Fumea crassiorella*)" [In German]. *Zeits. vergl. Physiol.*, vol. 33: pp. 1-13, 2 figs. 31 Jan. 1951. Copulation and egg-laying shorten the life of *Fumea* ♀♀. [P.B.]
71. Michelbacher, A. E., W. W. Middlekauff, and Charles Hanson, "Occurrence of a fungus disease in overwintering stages of the Codling Moth." *Journ. Econ. Ent.*, vol. 43: pp. 955-956, 2 figs. Dec. 1950. Fungus near *Beauveria bassiana* on *Carpocapsa pomonella*. [P.B.]
72. Muspratt, Vera Molesworth, "The behaviour of *Colias crocea* at St. Jean-de-Luz in Winter." *Entomologist*, vol. 83: pp. 217-224. Oct. 1950.
73. Nickels, C. B., "Notes on the life history and habits of the Pecan Nursery Casebearer in Texas." *Journ. Econ. Ent.*, vol. 44: pp. 433-434. June 1951. *Acrobasis caryvorella*.
- nom* 74. Norman, T., "The early stages of *Lycaenopsis buegeli*." *Journ. Bombay Nat. Hist. Soc.*, vol. 40: p. 569. Dec. 1950. Food plant *Prinsepia utilis*. [P.B.]
75. Oldroyd, H., "A giant bombyliid (Diptera) bred from the pupa of a cossid moth." *Proc. R. Ent. Soc. Lond. B.*, vol. 20: pp. 49-50, 6 figs: 15 June 1951: *Oestranthrax goliath*, n. sp.; host not identified.
76. Vasic, Konstantin, "Une contribution à la connaissance des causes du trouble de l'indice sexuel dans le stade critique de *Liparis dispar* L. (Lepidoptera, Liparidae)" [In Yugoslav, French summary]. *Bull. Coll. Forestry Univ. Belgrad*, vol. 1: pp. 311-336, 3 pls., 5 figs. 1950. Discusses stages leading to a gypsy moth outbreak, and factors upsetting sex ratio at peak; tachinid parasites seem to attack ♀ larvae preferably, resulting in excess of adult ♂♂. [P.B.]
77. van der Vecht, J., "Population studies on the coconut leaf moth *Artona catoxantha* Hamps. (Lep., Zyg.)" *Proc. VIII Int. Ent. Congr.*, pp. 702-715, 6 figs: 1950. Results of a 5-year study in Java. *Artona* normally breeds continuously in the rainy season; when it becomes abundant, action of parasites tends to separate generations, producing a situation which is unfavorable to the parasites, since larvae of the right stage are not continually present. Under some conditions (not clearly understood) this happens early in the rainy season and outbreak of *Artona* occurs before dry season reduces population. [P.B.]
78. Warren, B. C. S., "Biological notes on the subspecies *alpica* and *bigenerata* of *Papilio machaon*." *Entomologist*, vol. 84: pp. 11-16. Jan. 1951.
79. Wene, George P., "Sunflower Moth larva injuring to young citrus." *Journ. Econ. Ent.*, vol. 43: p. 948. Dec. 1950. *Homoeosoma electellum*.
80. Westdal, P. H., "A preliminary report on the biology of *Phalonia hospes* Wlshm. (Lepidoptera: Phaloniidae), a new pest of sunflowers in Manitoba." *80th Ann. Rep. Ent. Soc. Ontario*: pp. 36-38. 1950. Describes all stages and habits. [P.B.]
81. Wilkinson, A. Denby, "Hirudines following tractor and taking moths." *Brit. Birds*, vol. 44: p. 204. 1951. Records 3 swallow spp. feeding on *Plusia gamma* flushed by tractor in England. [C.R.]

82. Williams, C. B., and D. B. Long, "Phase Coloration in Larvae of Lepidoptera." *Nature*, vol. ~~166~~ p. 1035. 16 Dec. 1950. Larvae of *Plusia gamma* reared in crowded conditions develop unusually dark color, a phenomenon similar to that in migratory locusts. [P.B.] rom
83. Williams, Carroll M., "The metamorphosis of insects." *Scientific American*, vol. ~~182~~ pp. 24-28, 12 figs. Apr. 1950. Popular account, based largely on his own work with the Cecropia silkworm. [P.B.] rom

G. PHYSIOLOGY AND BEHAVIOR spt.

84. Turner, Neely, "Relation between sugar content of corn and infestation and survival of the European corn borer." *Journ. Econ. Ent.*, vol. 44: pp. 307-309, 1 fig. June 1951. *Pyrausta nubilalis*.
85. Vance, A. M., "Some physiological relationships of the female European Corn Borer Moth in controlled environments." *Journ. Econ. Ent.*, vol. 42: pp. 474-484, 2 figs. June 1949. Experiments of food requirements and effects of various factors on longevity and fecundity in *Pyrausta nubilalis*. [P.B.]
86. Way, M. J., and B. A. Hopkins, "The influence of photoperiod and temperature on the induction of diapause in *Diatraea oleracea* L. (Lepidoptera)." *Journ. Exp. Biol.*, vol. ~~27~~ pp. 365-376, 5 figs. Dec. 1950. Both have a direct effect, increase in either tending to prevent diapause. Effective time of action of photoperiod stimulation very limited. [P.B.] rom
87. de Wilde, J., "An experimental proof of the activity of the alary muscles in insects." *Proc. VIII Int. Ent. Congr.*, pp. 322-328, 8 figs. 1950. Contractions of the alary muscles of the heart, synchronous with the heart beat, were observed and recorded in isolated hearts of a number of Lepidoptera (larvae and adults). Evidently serve as heart dilators. [P.B.]
88. Williams, C. B., and B. P. Singh, "Effect of moonlight on insect activity." *Nature* vol. ~~167~~ p. 853. 26 May 1951. Tests with a mechanical trap not dependent on light showed average catches about five times as great at new moon as at full. The effect of moonlight in reducing night catches is not due merely to reduced efficiency of light traps. [P.B.] rom
89. Wolfram, Rosemarie, "Über die Histogenese der Excretpigmente bei verschiedenen Rassen von *Ptychopoda seriata* Schrk. und *Ephesia kühniella* Z." [In German]. *Zts. ind. Abst. und Vererbungslehre*, vol. ~~83~~ pp. 254-289, 15 figs. 17 Dec. 1949. rom
90. Yamafuji, Kazuo, "Existence of an enzyme catalyzing the hydrogenation of oximes in Silkworms." *Nature*, vol. ~~167~~ pp. 770-771. 12 May 1951. Evidence for the possibility that *Bombyx* can use inorganic nitrogen salts as nutrients. [P.B.] rom

H. MIGRATION spt.

91. Abbott, Charles H., "Twenty-five years of migration of the Painted Lady Butterfly, *Vanessa cardui*, in southern California." *Pan-Pacific Ent.*, vol. 26: pp. 161-172. 29 Dec. 1950. Summary of information on 4 migrations, with a discussion of possible causes. [P.B.]
92. Abbott, Charles Harlan, "A quantitative study of the migration of the Painted Lady Butterfly, *Vanessa cardui*." *Ecology*, vol. 32: pp. 155-171, 4 figs. Apr. 1951. Analysis of 5 migrations in southern California, covering geography of the area, vegetation types, direction of migration, and influence of weather. No theory seems entirely adequate to explain the migration, though population pressure fits the facts best. [P.B.]
93. Beall, Geoffroy, "A coordinated study on the migration of the Monarch butterfly: a plea for information from local naturalists." *Lep. News*, vol. 5: pp. 37-40, 3 figs. 1951.
94. Brown, F. Martin, "Some notes on *Danaus plexippus* in 1950." *Lep. News*, vol. 4: pp. 45-46. "1950" [Jan. 1951].
95. Burton, J. F., and D. F. Owen, "Further observations on migrant insects in the Thames estuary." *Entomologist*, vol. 84: pp. 160-161. July 1951. Several Lepidoptera mentioned. [P.B.]

96. Bryk, F., "Parallele Zugrichtung bei Schmetterlingen und Vögeln im Stockholmer Scherenhofe" [In German]. *Ent. Tidskr.*, vol. 71: pp. 177-178. 31 Dec. 1950. Reports migrating *Pieris brassicae* and crows following the same course. [P.B.]
97. Buchholz, Otto, "Flight Notes: two *Papilio*, one *Kricogonia*." *Bull. Brooklyn Ent. Soc.*, vol. 44: p. 72. Apr. 1949. Mass movements, *P. palamedes* and *P. troilus ilioneus* and *K. lyside*. [P.B.]
98. Dannreuther, T., "Migration records, 1950." *Entomologist*, vol. 84: pp. 85-90, 102-106. Apr., May 1951. Records of 52 immigrant spp. [P.B.]
99. Darge, Philippe, "Sur une migration de Lépidoptères" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 216-217. "Jan.-Feb." [12 July] 1950. *Vanessa cardui* and *Colias croceus*.

I. TECHNIQUE

100. Braun, Annette F., "Leaf-mining Lepidoptera with special reference to methods of rearing." *Lep. News*, vol. 4: pp. 3-6. [May] 1950.
101. Brown, F. Martin, "Field techniques for butterfly collecting." *Lep. News*, vol. 4: p. 10. [May] 1950.
102. Evans, William H., "The care of larvae in diapause." *Lep. News*, vol. 4: p. 70. "1950" [Mar. 1951].
103. Evans, William H., "A rearing house for Lepidoptera." *Lep. News*, vol. 5: p. 12, 1 fig. [June] 1951.
104. Gray, P. H. H., "An apparatus for incubating lepidopterous larvae or pupae in nutrition and environment tests." *Lep. News*, vol. 5: p. 35, 1 fig. 1951.
105. Malaise, René, "How to keep collected insects free from mold and pests in any climate." *Proc. VIII Int. Ent. Congr.*, pp. 926-927. 1950. Recommends the use of acetic ether, in vessels tightly closed or plugged with compressed cotton. [P.B.]
106. Metcalf, Z. P., "Methods in systematic entomology." *Proc. VIII Int. Ent. Congr.*, pp. 152-155. 1950. Describes the author's system of filing and indexing bibliographic material, which he regards as basic to good taxonomic work. [P.B.]
107. Muspratt, Vera Molesworth, "A new ready-made moth trap." *Entomologist*, vol. 83: pp. 56-57. March 1950. Gentian flowers. [P.B.]
108. Way, M. J., P. M. Smith, and B. Hopkins, "The selection and rearing of leaf-eating insects for use as test subjects in the study of insecticides." *Bull. Ent. Res.*, vol. 42: pp. 331-354, 1 pl., 1 fig. Aug. 1951. Describes rearing techniques for 11 spp. of Lepidoptera which are more or less suitable for mass rearing. [P.B.]
109. Williams, C. B., "A light trap for insects." *Lep. News*, vol. 3: pp. 63-64, 2 figs. "June" [Oct.] 1949.

J. MISCELLANY

110. de Ricci, D., "Premier contact avec la faune tropicale" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 321-328, 1 pl. "Nov.-Dec. 1950" [8 May 1951]. Notes on collecting in Brazil, and on status of entomology in Brazil and Argentina. [P.B.]
111. Riley, N. D., "The protection of British insects: an appeal." *Entomologist*, vol. 84: pp. 99-101. May 1951. Lists 15 spp. needing protection. [P.B.]
112. Roell, Ludwig, "Digne 1949" [In German]. *Zeits. Lepidopt.*, vol. 1: pp. 35-40. 1 May 1950. Account of a collecting trip in the French Alps. [P.B.]
113. Rutherford, C. L., "The next 50 years." *Entomologist*, vol. 84: pp. 61-63. Mar. 1951. Plea for 'new philosophy of collecting' - especially exact distribution records. [P.B.]
114. Viette, P., "Les travaux de P. Chrétien" [In French]. *Rev. Franc. Lépid.*, vol. 12: pp. 250-256, 282-288. "Mar.-Apr." [11 Dec.] 1950. Bibliography.
115. Wilcke, Hermann, "A season of Lepidoptera collecting in the Austrian Tyrol." *Lep. News*, vol. 3: pp. 7-9. 'Jan.' [Mar.] 1949.
116. Wright, D. W., Q. A. Geering, and J. A. Dunn, "Varietal differences in the susceptibility of peas to attack by the pea moth, *Laspeyresia nigricana* (Steph.)." *Bull. Ent. Res.*, vol. 41: pp. 663-677, 5 figs. Apr. 1951.

SOCIETY AFFAIRS

The Chairman of the Nominating Committee, F. MARTIN BROWN, has presented to the Secretary the following nominations for 1953 officers of the Lepidopterists' Society:

President — WM. T. M. FORBES
1st Vice President — T. N. FREEMAN
Vice President — E. MARTIN HERING
Vice President — YOSHIO OKADA

Executive Council —

To fill vacancy left by death of Prof. Federley —
WALTER HACKMAN

Terms expire Dec. 1955 —

JOSE HERRERA GONZALES
JOHN L. SPERRY

The Secretary reports that the proposed amendments to the Constitution published in the *Lep. News*, Vol. 5, p. 111, were all approved at the Third Annual Meeting of the Society in Ottawa, Canada.

INQUIRY ON TYPES OF HELIOTHIINAE

Information is desired regarding the existence and location of the types of certain heliothid moths listed below.

Some of the species listed below date back a century or more and the types may have disappeared. It is hoped that at least those that are relatively recent have been preserved somewhere and are available for study and comparison.

J. E. Smith (Abbott & Smith)

Rhodophora gaurae

Henry Edwards

Pseudotamila vaccinia

Fabricius

Heliothis obsoleta

Heliothis virescens

Grote

Heliosea celeris

Thyreion snowi

Timora toralis

Schinia brevis

Grote and Robinson

Oxylos citrinellus

Hübner

Heliothis armigera

Schinia bifascia

Schinia tuberculum

Guenée

Heliophana bina

Eupanychis spinosae

Heliothis subflexa

Rhodophora florida

Schinia jaguarina

Schinia arcigera

Strand

Schinia jaguarina

ab. *demaculata*

Schiffermüller

Heliothis ononis

Canthylidia scutosa

John B. Smith

Manruta elingua

Schinia ciliata

Geyer

Schinia sanguinea

ROWLAND R. MCELVARE

26 Bogart Ave., Port Washington, N. Y., U. S. A.

ERRATA

In Vol. 5, p. 101, penultimate paragraph, "*Afrida notatis**" and "*Metaleura albilinea**" should have been "*Afrida ydatodes*" and "*Metalectra albilinea*".

NOTICES

Lepidopterists' Society members may use this page free of charge to advertise their offerings and needs in Lepidoptera. The Editors reserve the right to rewrite notices for clarity or reject unsuitable notices. Unless withdrawn sooner by the member, each notice will appear in three numbers. We can not guarantee any notices but expect all to be *bona fide*. Please notify us of any abuse of this service.

Set of Seitz' Vol. 11 (INDO-AUSTRALIAN NOCTUIDAE), English language edition, all published parts, for sale for \$20., about $\frac{2}{3}$ the recent purchase price. J. G. Franclemont, U. S. National Museum, Washington 25, D. C.

~ / i / BRAZILIAN BUTTERFLIES and other insects for sale, 1951 catch, papered with full data, mostly classified. Please write to Jorge Kesselring, Caixa Postal 6, João Pessoa (Paraíba), BRAZIL.

Wanted: *Argynnis*, *Speyeria*, *Brenthis*, *Boloria*, etc., *Erebia* and other satyrids from all parts of the world. Will collect in all orders of insects, esp. from Denmark, in exchange for these. Georg Christensen, Parmagade 24 III, Copenhagen S, DENMARK.

Catocala herodias Stkr., *Automeris pamina* Neum., and *A. pamina* f. *aurosea* Neum. in series, many other rare moths, offered in exchange for the following nos. from the McD. list: 31d; 35b; 46a; 52b,d,e,g; 79a; 206d,e; 207a,b; 215; 241; 243; 245; 254; 270c; 337b; 423c; 430a; 455h; 456a; 467c; 469. Also want any nearctic *Oeneis* or *Erebia* including common species in series. Send list of desiderata to Paul R. Ehrlich, 538 Academy St., Maplewood, N. J.

Exchange desired to complete my collection of Nearctic and European Lepidoptera. Desire material as follows: all Rhopalocera, all Macroheterocera; and Hepialidae, Yponomeutidae, Pterophoridae, Orneodidae, Pyralidae, Aegeriidae, Cossidae, Zygaenidae, Cochlidiidae, Nolidae, Lacosomidae, Psychidae. Offer in exchange Lepid. of Ohio and elsewhere. Edward C. Welling, 700 E. 240 St., Euclid 23, Ohio.

Palaearctic *Euphydryas* Wanted - long series for research. Wish to exchange Nearctic butterflies or will pay Lepid. Society dues for foreign collectors who can procure long series of needed species for me. Esp. desire Central Asiatic specimens. Nicholas W. Gillham, 4 Washington Square North, New York City, N. Y.

Exchange for South American or southwestern U. S. A. Sphingidae: Seitz "American Moths", English edition, pp. 5-416, pls. 1-51, Castniidae, Zygaenidae, Syntomidae complete; Arctiidae incomplete; pp. 675-711 Bombycidae complete text with pls. 140-141. F. E. Holley, 126 Ash St., Lombard, Ill.

MEXICAN butterflies, papered, with full data, offered in exchange for Theclinae of the world. Inquiry invited. E. W. Fager, Institute of Radiobiology and Biophysics, University of Chicago, Chicago 37, Ill.

Lepidoptera from PERU for scientific purposes collected on order by professional field entomologist for many years serving research entomologists. Felix Woytkowski, Francisco Zela 1067, Letra "L", Lima, PERU.

For sale: Vol. IX, plates only, of Seitz' "Macrolepidoptera of the World." Excellent condition. Otto H. Schroeter, P. O. Box 391, Quaker Hill, Conn.

California moths and butterflies for sale, papered, pinned, to suit. Many pupae available. Inquiry invited. F. P. Sala, 1912 Hilton Drive, Burbank, Calif.

LAUCK COLLECTION FOR SALE. Limitation of space requires disposal of all but local working collection. Included are: about 7200 mounted butterflies in cabinet with 40 12" x 16" glass-topped drawers and 60 16" x 20" glass-topped cases without cabinet, plus 75 cigar boxes of about 4000 papered butterflies. Series are especially rich for California and Colorado (64 *Erebia magdalena* in one case). Some exotic specimens, including 7 cases of Mexican spp. Price \$1000, F. O. B. Alton. A. G. LAUCK, 2716 Grandview Ave., Alton, Ill.

LIVING MATERIAL

Wanted: fertile ova, larvae, and less common moths of the genus *Catocala*; also Aegeriidae. Offer in exchange many spp. of Lepidoptera or other insects. Or will try to secure your needs in this part of the country. A. E. Brower, 5 Hospital St., Augusta, Maine.

Expect to have available at their season, eggs of *P. cecropia*, *C. promethea*, *A. luna*, *A. io* and *C. regalis*. Would like to trade for adult Lepidoptera. List of desiderata and terms of trading upon request. Otto Ackermann, 639 Walnut St., Irwin, Pa.

Living pupae, cocoons, and chrysalids from Europe and cocoons of *Actias selene* (India) for sale or exchange for native pupae, especially Sphingidae and Saturniidae. Native and exotic ova in season. Duke Downey, 51 West 4th St., Sheridan, Wyoming.

Living pupae of European Lepidoptera offered in exchange for pupae of Papilionidae, Saturniidae, Sphingidae from North America. Adolf Witz, Groner Strasse 190, Göttingen, GERMANY.

Eggs and living chrysalids of *THEOPHILA MANDARINA* required. In order to make arrangements, please write first. J. M. Legay, Assistant in Zoology, Station de Recherches Sericoles, Ales (Gard), FRANCE.

REARING MATERIAL WANTED (eggs, pupae) of rarer Sphingidae, Saturniidae (esp. *Hemileuca*), Arctiidae, *Catocala*. Buy or exchange. Also have large stock *Urania ripheus*, many *Morpho*. Desire correspondence with collectors in Japan and South America. Eugene Dluhy, 3912 N. Hamilton Ave., Chicago 18, Ill., U. S. A.

RESEARCH REQUEST

A faunal study of the butterflies of Oklahoma is now in its fourth year of field investigations. Within a few years it is expected that a biological and systematic treatment of Oklahoma butterflies will be published. Meanwhile, the undersigned cordially appeals to all lepidopterists who have collected in Oklahoma to send him all possible butterfly records, including localities, dates, and any other information. Particularly needed are rearing records, Oklahoma foodplants, and other biological details.

Dr. WALFRIED J. REINTHAL, Central State Hospital, Norman, Okla.

LISTINGS FOR 1952 LIST OF MEMBERS

The 1952 List will be prepared for publication soon. Members whose interests were not shown in the 1951 List or who wish to have the entry changed should so notify the Editor as soon as possible. Corrections of names and addresses should also be brought to his attention.

ADDITIONS TO THE MEMBERSHIP LIST*

- Allyn, Arthur C., Jr., 100 West Monroe St., Chicago, Ill.
 Brumbaugh, Norman J., 1808 Moore St., Huntingdon, Pa.
 Carleton, Bukk G., 3rd, Parade Hill Lane, New Canaan, Conn.
 Chase, Hazel (Mrs.) 272 Union St., Galion, Ohio.
 Crampton, Charlene E. (Miss), Rt. #1, White Pigeon, Mich.
 Eisner, Curt, Violonweg 7, 's-Gravenhage (The Hague), NETHERLANDS.
 Graves, John D., 1711 Short St., Berkeley 2, Calif.
 Hartig, Fred (Count). Via Gregoriana 25, ITALY.
 Heitzman, John R., 2438 Sterling Ave., Independence, Mo.
 Jewett, Stanley G., 7742 S.E. 27th Ave., Portland 2, Ore.
 Johnson, F.L., United Africa Co. Ltd., P.O. Box 22, Akim-Oda, GOLD COAST, AFRICA.
 Johnston, David W., Box 377, Broken Bow, Nebr.
 Knudsen, John P., Oglethorpe University, Georgia.
 Kuzuya, Takeshi, Minami-Sonomachi 1-3, Nakaku, Nagoya, JAPAN.
 Latham, Roy, Orient (Long Island), New York.
 MacLeod, Ellis G., 8810 Manchester Rd., #2, Silver Spring, Md.
 MacNeill, C. Don, Dept. of Entomology, 112 Agriculture Hall, University of California, Berkeley 4, Calif.
 McKay, Margaret (Miss), Div. of Entomology, Science Service Bldg., Ottawa, Ontario, CANADA.
 Nevile, H. Ralph, The Rectory (Top Flat), Leire, near Rugby, Warwicks., UNITED KINGDOM.
 Obratzsov, Nicholas S. (Dr.), 110 Maple Ave., Sea Cliff (L.I.), N. Y.
 Ogata, Masami (Dr.), Ogata Hospital, No. 18, 3-chome, Imabashi, Higashi-ku, Osaka, JAPAN.
 Otdel, Knizhny, Akademii Nauk, Ul. Kropotkina, 16, Moscow, U. S. S. R.
 Roever, Kilian, R. F. D. #2, Jackson, Tenn.
 Ryan, Charlton (Miss), 1822 Huff St., Wichita Falls, Texas.
 Scott, Leonard M., 6537 S.E. 83rd Ave., Portland 66, Oregon.
 Shulgin, Michael, 1113 Findlay Ave., The Bronx, New York, N. Y.
 Simmons, Robert S. (Dr.), 1305 Light St., Baltimore 30, Md.
 Starrett, Daniel, P.O. Box 1074, Sparta, New Jersey.
 Throne, Alvin L., 3916 N. Maryland Ave., Milwaukee 11, Wis.
 Wilson, Bruce V., 815 N. Chipman St., Owosso, Mich.
 Zepf, William Wright, 2 Mechanic St., Haddonfield, New Jersey.

*Note: Publication of changes of address will be discontinued. Correct addresses will appear annually in the *List of Members* published toward the end of each year. — Editors.