

and Harlan Thorvilson for their comments on the manuscript. Appreciation is also extended to James Cokendolpher for his valuable assistance in examination of the gynandromorph's internal anatomy. We thank Mary Peek for typing the various drafts of the manuscript.

## LITERATURE CITED

- Berndt, J. P. and G. Kremer. 1982. Heat shock-induced gynandromorphism in the pharaoh's ant *Monomorium pharaonis* (L.). *Experientia* 38: 798-799.
- . 1983. New categories in the gynandromorphism of ants. *Ins. Soc.* 30: 461-465.
- Brust, R. J. 1966. Gynandromorphs and intersexes in mosquitoes (Diptera: Culicidae). *Can. J. Zool.* 44: 911-921.
- Buschinger, A. and H. Stoewesand. 1971. Teratologische untersuchungen an ameisen (Hymenoptera: Formicidae). *Beitr. Entomol.* 21: 211-241.
- Cokendolpher, J. C. and O. F. Francke. 1983. Gynandromorphic desert fire ant, *Solenopsis aurea* Wheeler (Hymenoptera: Formicidae). *J. N.Y. Entomol. Soc.* 91: 242-245.
- Donisthorpe, H. 1929. Gynandromorphism in ants. *Zool. Anz.* 52: 92-96.
- Hall, D. W. and I. C. Smith. 1953. Atypical forms of the wingless worker and the winged female in *Monomorium pharaonis* (L.) (Hymenoptera: Formicidae). *Evolution* 7: 127-135.
- Hung, A. C. F., W. N. Norton, and S. B. Vinson. 1975. Gynandromorphism in the red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae). *Entomol. News* 86: 45-46.
- Morgan, T. H. and C. B. Bridges. 1919. Contributions to the genetics of *Drosophila melanogaster*. I. The origin of gynandromorphs. *Carnegie Inst. Wash. Publ. No. 278*, pp. 3-122.
- Rothenbuhler, W. C., J. W. Gowen, and O. W. Park. 1952. Androgenesis with zygogenesis in gynandromorphic honeybees (*Apis mellifera* L.). *Science* 115: 637-638.
- Vandel, A. 1931. Etude d'un gynandromorphe (dinergatandromorphe) de *Pheidole pallidula* Nyl. *Bull. Biol. France Belg.* 65: 114-129.
- Wheeler, W. M. 1903. Some new gynandromorphous ants with a review of the previously recorded cases. *Bull. Am. Mus. Nat. Hist.* 19: 653-683.
- . 1931. Concerning some ant gynandromorphs. *Psyche* 38: 80-85.
- . 1937. Mosaics and other anomalies among ants. *Harvard Univ. Press. Cambridge, Mass.* 95 pp.