

ENVENOMATION BY THE SPIDER *TRACHELAS TRANQUILLUS* (HENTZ)
(ARANEAE: CLUBIONIDAE)

Spider envenomation and its consequent discomforts have received much attention lately due to the discovery of the lesions produced by the bite of the brown recluse spider, *Loxosceles reclusa* Gertsch & Muliak. Although misinformation and rumor have resulted in exaggerated fearfulness of spiders by the general public, it is important to note that spiders do bite people occasionally and possible severe reaction following the bite makes them a public health problem.

Of the numerous reports of spider bite in the literature, the following selections provide the most complete coverage of the subject. The first comprehensive work done in the field of spider envenomation was by Baerg (1959, Univ. Ark. Agr. Exp. Sta. Bull. 608, 43 p.) who mentioned 5 known dangerous species of spiders in the U.S. in addition to the black widow spider, *Latrodectus mactans* (Fabr.). This list has been expanded by many authors, most notably Horen (1963, J. Amer. Med. Assoc. 185: 839-43), who compiled a list of dangerous species and noted venom effects, based on clinical and experimental data. Gorham & Rheny (1968, J. Amer. Med. Assoc. 206: 1958-62) have added species to the list of biting spiders, and have reviewed recent literature. More recent reviews of spider venom literature are found in Frazier (1969, Insect Allergy: Allergic and Toxic Reaction to Insects and Other Arthropods. W. H. Green, Inc., St. Louis, Mo. 493 p.) and Spielman & Levi (1970, Amer. J. Trop. Med. Hyg. 19: 729-32). An excellent reference dealing with *Loxosceles* spiders is Keh (1970, Calif. Vector Views 17: 29-34).

A spider bite case was reported to the Department of Entomology and Applied Ecology of the University of Delaware in mid-August 1969, by a young woman seeking information and identification of the spider. The woman, a 23-year-old Caucasian, had been bitten on the right side of the face during the night of 13 August 1969, apparently when she rolled over on the spider while sleeping in her bed. The bite site became swollen and very painful by morning, and she reported to a physician. By this time, the swelling had spread to the entire right side of her face, and she recalled some nausea. She was given an injection of penicillin and sent home to rest. The pain subsided for some time, but returned with increased swelling on the 5th day. The physician again administered penicillin for what was diagnosed as a severe secondary infection. Within 2 days, the pain had ceased and the swelling subsided.

A 2nd possible bite was reported by the woman's roommate on the same night. The reaction in this case was not severe enough to warrant medical attention, and was dismissed as being no more painful than a bee sting.

The spider specimen collected from the pillow of the woman in the 1st case was identified as an adult female *Trachelas tranquilus* (Hentz). A search of the room

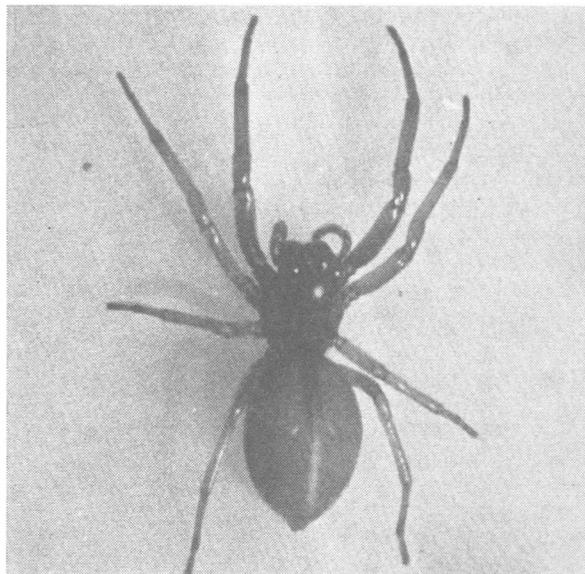


FIG. 1. *Trachelas tranquilus* (Hentz), ♀, × 5.7.

yielded 4 more spiders of the same species (all females), which could possibly account for the 2nd bite.

Trachelas tranquilus (Hentz), the Broad-faced Sack Spider, a member of the family Clubionidac, is a fairly common, medium-sized spider found in grass and leaf litter (FIG. 1). Many authors have reported it entering houses in the late summer and fall. The specimens collected were large for the species (body 10 mm), with robust chelicerae, doubtless capable of inflicting a painful bite. This species has never before been implicated in cases of envenomation, although other clubionids have been mentioned several times (Furman & Reeves, 1957, Calif. Med. 87: 114; Baerg, 1959, loc. cit.; Gorham & Rheny, 1968, loc. cit.; Spielman & Levi, 1970, loc. cit.). This species has been reported by Fitch (1963, Misc. Publ. Kansas Mus. Nat. Hist. 33, 202 p.) as a possible scavenger, feeding on dead spiders and insects, a habit unusual for spiders. Association with such a habit might suggest transmission of infection, as in this case.

The clinical response reported here should not be construed as evidence of a new dangerous spider species. It does indicate that *Trachelas tranquilus* can inflict a painful bite with a severe local reaction and possible infection. The bite could be more serious if inflicted on persons sensitized to arthropod venoms.

Assistance in preparing the clinical report by Dr Harry A. Carl, M.D., New Castle, Delaware, is gratefully acknowledged.—George W. Uetz, Department of Zoology, University of Illinois at Urbana-Champaign, Illinois 61820, U.S.A.