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Unusual Damage to the Floors of a House by a Species of Pemphredinid Wasp, Stigmus fulvicornis Rohwer. During the latter part of August 1923 the writer was requested to visit the home of Mr. Ed. Williams in Starkville, Miss. and investigate the damage to his floors caused by what he thought to be ants. After reaching Mr. Williams' home the writer was very much surprised to find a portion of the floor of his porch bearing numerous holes about the diameter of the head of an ordinary pin or slightly smaller. By the side of a number of these holes were small piles of sawdust. Flying in the air above these holes and crawling on the floor here and there were numerous small wasps which on superficial examination might have been taken to be parasites of whatever insect was damaging the floors. The holes in the floor bore a striking resemblance to those of Ipid beetles, in fact the writer would, upon a hasty examination, have concluded that a species of Ipid was the depredator and that the wasps were parasites on them. A very careful examination of several nests proved that the wasps were the cause of the damage and that they were using the floor as a place in which to construct their nests. A number of the insects were secured but they were so immature that no effort was made to have them determined.

With the literature available the writer was able to place the wasp in the genus Stigmus. Specimens were forwarded to Mr. S. A. Rohwer, of The United States National Museum, with a request for a specific determination. Mr. Rohwer wrote that the species was nearest S. conestogorum Rohwer, but differed from this species in a number of ways, enough to warrant him in calling it a new species, to which he gave the name fulvicornis because of its yellowish or ferruginous colored antennae. Mr. Rohwer took issue with the writer in regard to the wasp's ability to construct nests in the floor. He was of the opinion that the wasps were using the holes made by Ipid beetles or else nail holes for their nests. There is no doubt about the wasps constructing holes in the floor as Mr. Williams observed them carrying sawdust-like frass out of their holes. The writer also examined enough of the nests to be convinced that the wasps were solely responsible for the nests and not the wood-boring beetles, as one would ordinarily think.

A review of the literature dealing with the habits of the wasps of the genus *Stigmus* contains no reference to any species of the genus ever having attacked furniture or floors; normally the wasps breed in the stems of plants or twigs of trees but there is a reference to one species having been bred from a gall. It is left for one to speculate as to why this species should attack floors when there were plenty of trees and plants nearby in which it might have constructed its nests. Will this species continue to be a household pest or was this simply a variation in the habit of the wasp?

On September 10th, a further visit was made to the home of Mr. Williams where the writer's attention was called to the holes made in the floor of the dining room and hall. The floor was hard and well preserved, and not soft and punky like that of the piazza. Both floors were of pine but that of the piazza had been subject to weathering, while that of the interior of the house was almost as well preserved as it was when the house was built. After seeing the nests in this type of wood one was more than ever convinced of the wasp's ability to construct nests in other kinds of wood besides soft and decaying lumber. As a rule the nests in the interior of the house were constructed in the soft wood between the hard grain layers but this was not invariable, for a number of nests were observed which penetrated even the hard grain layers. On the porch a count of the nests occurring in one plank was made and it was found that fifty nests occupied this plank, which was about three

inches wide and four and a half feet long. The distribution of the holes in the plank was not uniform but the holes were rather scattered; in some places there were as many as six holes to the square inch, whereas in other places there were only one or two, or perhaps none, in an area equally as large.

One hole, which was examined, extended into the floor vertically for a distance of one-fourth inch when it suddenly turned at right angles and ran parallel with the surface of the floor for seven inches. In this gallery was found a great deal of frass, but no signs of the wasp or its immature stages.

The writer recommended that Mr. Williams treat each of the holes with carbon bisulphide by injecting this material into the holes with a little oil-can or syringe. This treatment to be followed in a couple of days by painting or varnishing the floor.

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The Aldrich Collection of Diptera. The National Museum has recently received as a gift from Dr. J. M. Aldrich his private collection of Diptera. This collection was begun in 1890, and for 28 years received a good share of the owner's efforts; since he went to the National Museum in 1918 it has, however, received no additions. A recent inventory showed it to contain 44,610 pinned specimens and 4,145 species fully named; 534 of the latter were represented by type material. There are some hundreds of undescribed species; and as Dr. Aldrich collected for many years in the Pacific Coast and Rocky Mountain regions, his collection contains many named species not heretofore represented in the National collection.

Dr. Aldrich also donated to the museum his card index of the literature of North American Diptera, begun in 1898 and now extending to about 70,000 references as nearly as can be estimated. With the exception of about 20 hours' work, this is all by the hand of the owner himself, and represents to a large extent his own conclusions from the literature rather than a mere compilation.

In a letter to his chief presenting the collection and index, Dr. Aldrich states that he was deterred from taking this action sooner because the salaries paid by the museum are still on the scale established in 1882 (except for a temporary war bonus of \$240), and he did not feel sure that he could continue permanently as one of the curators. Recently, however, under the reclassification act passed by the last congress, the museum staff have been assured of a new pay schedule approximating the requirements of the present time.

Science, October 19, 1923