

NOTES AND QUERIES.

A JAPANESE BUG NEW TO NEW JERSEY (Hemip.).

During the latter part of the summer of 1915 an outbreak of "lace bugs" occurred on hardy azaleas growing in widely separated parts of New Jersey, notably at Rutherford, Riverton, Arlington, Palmyra and Far Hills. At some of these places the damage was quite severe, much of the foliage being lost and the remainder discoloured and brown. Through the courtesy of Dr. L. O. Howard, the species was identified by Mr. Otto Heidemann as *Stephanitis azaleæ* Horv., of the family Tingitidæ. Mr. Heidemann also said that this insect was first observed in the United States by Dr. Chittenden several years ago at Washington, D. C., on azalea plants from Holland, the bugs being imported there from Japan. Most of the infested azaleas in New Jersey came originally direct from Japan. For the past several years *Azalea amana* var. *Hinodegiri* has been a favorite with New Jersey importers, and this was the variety against which most of the bugs directed their attacks. The species was described in 1912 by Dr. G. Horvath in the *Annales Musci Nationalis Hungarici*, p. 333, Budapest, Austria.

HARRY B. WEISS, New Brunswick, N. J.

A STATE'S INSECTS AND THEIR ACTIVITIES.

BY HARRY B. WEISS, NEW BRUNSWICK, N. J.

According to Smith's Insects of New Jersey, and other papers dealing with the insect fauna of that State, the number of species listed from New Jersey is about 10,530. Considering them collectively, and in a general way, it is interesting to know what they are doing. Are most of them injurious to vegetation? Are many beneficial? and so on, are the questions which naturally arise when so many species are considered. Such inquiries can best be answered by charting the actual proportions of each group engaged in different lines of work. This has been done on the accompanying chart. The large circle indicates what proportion of the total number of all species found in New Jersey is occupied by each of the important orders. The smaller circles indicate the predominating activities of each of the main groups, these activities being separated as: insects injurious to vertebrates, those feeding upon or injurious to vegetation, predatory species, scavengers and parasites. It would be possible, of course, to have a larger number of divisions, but many