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DROSOPHILA REPLETA WOLLASTON

BY FREDERIC KNAB.

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DROSOPHILA REPLETA WOLLASTON.

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A series of this species has been recently received at the U. S. National Museum from Calabacillas, State of Chihuahua, Mexico, through Dr. S. McGibbon. In the course of determination it was found that although this species is a very widely distributed one, but little has been published concerning it. The species stands in the Aldrich catalogue as *Drosophila punctulata* Loew, but Becker, in the "Katalog der paläarktischen Dipteren," vol. 4, 1905, makes Loew's species and *D. adspersa* of Mik synonyms of *D. repleta* Wollaston, and there seems every reason to accept this synonymy. In justice to Mik it should be added that he himself suspected the identity of his species with Loew's, but he had no means of verifying it.

The species is a strikingly colored one. The mesonotum and scutellum are gray, mottled with small dark brown spots, these spots mostly confluent and tending to form four broad longitudinal stripes on the disk. The abdomen is marked black and yellow—dorsally there is a broad, yellow, continuous median longitudinal stripe and each segment is broadly yellow at the base and narrowly so on the apical margin. Mik gives a good detailed description of the insect, but it should be kept in mind that the coloration is subject to considerable variation and that the structural characters must be carefully compared. Thus in the majority of specimens before me the legs are yellow and the darker shadings described by Loew and Mik are not very obvious; in other specimens the legs are almost wholly dark, almost black. Yet these all belong to one species. I am inclined to think that the insect darkens somewhat with age and that perhaps also the character of the food may have some influence, as is known to be the case in certain blood-sucking Diptera.

The species appears to have a very wide distribution in the warmer parts of the globe. Wollaston's specimens came from Madeira, Loew's from Cuba and Mik's from Vienna (Austria) and Ashanti (West Africa); Williston records the species from the island of St. Vincent. There are many specimens in the National Museum collection, some of which stood determined by Mr. Coquillett as *punctulata*, while the rest turned up among the undetermined material. There is but a single specimen from the Old World, taken by C. W. Howard at Lourenço Marques, Portuguese East Africa; it agrees in every respect with American specimens. There are specimens from the following American localities: New York (E. B. Southwick); District of Columbia; St. Louis, Mo., Oct., 1904 (A. Busck); Flat River, Mo., Oct. (T. Pergande); Nashville, Tenn., 17 Aug. 1904 (H. S. Barber); Jacksonville, Fla. (Mrs. A. T. Slosson); Key West, Fla.; Willis, Tex.; San Diego, Tex., 25 May, at exuding sap of *Celtis occidentalis* (E. A. Schwarz); Brownsville, Tex. (C. H. T. Townsend); Claremont, Cal. (C. F. Baker); Cuernavaca, Mex., 7 July, 1900 (C. C. Deam); Amatlan de los Reyes, near Córdoba, Mex., 16 Feb., 1908, about wine-bottle in tavern (F. Knab); Nicaragua; Port Limon, Costa Rica, 24 Sept. 1905, one specimen at crab-hole in cacao orchard (F. Knab); Alhajueta, Panama, 15 April, 1911,

on wild fig (A. Busck); Havana, Cuba (S. Fernandez); Cayamas, Cuba, 28 May, 10 June, in house (E. A. Schwarz); Baracoa, Cuba, Sept., 1901 (A. Busck); Kingston, Jamaica, 11-9-07 (M. Grabham); St. Domingo, 8 June, 1905 (A. Busck); Ceara Brazil (F. D. de Rocha); S. Paulo, Brazil, bred from peaches (R. von Ihering); Buenos Ayres, Argentina.