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A new South African species,

D. opisthomelaina. DIS 24:90 (1950)

This new species was recently discovered amongst batches of mixed Drosophilids collected in the north-eastern parts of this country. It appears to have been confused with D. melanogaster and/or D. simulans, which species it greatly resembles. It appears, indeed, to belong to the same subgroup as the last-named two species, and thus to the melanogaster species group of the Sophophora. Both sexes, however, differ from those of the two species in having brighter red eyes. The males differ further in two main criteria. First, the single sex-comb on each anterior tarsus has an average of 7 bristles only; second, the anal plate is prolonged ventrally into a flat-toed plate covered with bristles, and the primary clasper is short, with about 12 primary teeth arranged in two convex rows and 1 secondary tooth anterior to the clasper. The female differs further in the abdomen, in that the fifth tergum also is black; this darker tip of the abdomen, however, is not a constant characteristic in laboratory stocks, since in crowded cultures it greatly resembles that of the other species. The eggs resemble those of the other two species, and so do the mitotic chromosomes, though preliminary study of salivary-gland chromosomes shows an apparently longer arm for the small fourth chromosome. In preliminary tests D. opisthomelaina has proved to be cross-sterile with both D. melanogaster and D. simulans.