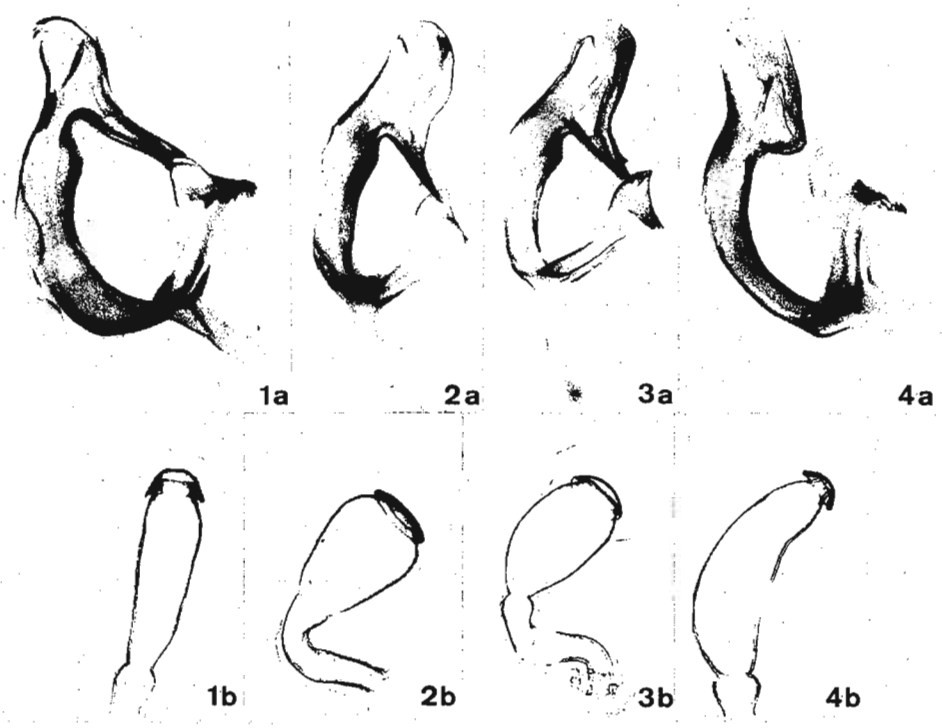
Glätzer, K.H. Universität Düsseldorf, Germany. The status of Drosophila "pseudoneohydei."

In 1962 the Max-Planck-Institut für Biologie in Tübingen, Germany, received D. neohydei WASSERMAN from Austin, Texas, carrying the stock number H 207.26. Since this stock was difficult to maintain in the laboratory, a second, supposedly better breeding one, was subsequently ordered (Number H 186.58). An investigation of the nuclear structures in the spermatocytes of this stock carried out by O. Hess did not, however, support the classification as D. neohydei and the stock was, therefore, given the provisional name D. "pseudoneohydei." In spite of the International Rules of Zoological Nomenclature which prevent the use of species designations not yet officially published, this name, designated for internal laboratory use only, has already appeared in the literature (Hennig et al., 1970). In early 1973 this species was newly investigated in this laboratory and has now finally been conclusively identified as being D. eohydei WASSERMAN. The identification was carried out by the appearance of the reproductive organs, the penes and the spermathecae, organs which are very characteristic for these species of the repleta group (Wasserman, 1962). The photos clearly show the equality between D. eohydei (Figs. 2a, b) and D. "pseudoneohydei" (Figs. 3a, b) as well as the structural characteristics of the penes and spermathecae of D.



hydei (Figs. 1a, b) and D. neohydei (Figs. 4a, b). The conclusions drawn from these morphological criteria are in full agreement with breeding data. For instance, progeny can be obtained from both reciprocal crosses between D. eohydei and D. "pseudoneohydei," whereas crosses between D. neohydei and D. "pseudoneohydei" in either direction are always unsuccessful. On the basis of these investigations, as well as those carried out by Wasserman in 1962 (in which stock number H 186.58 was already listed under D. eohydei!), it is unequivocally clear that D. "pseudoneohydei" is, in reality, a stock of D. eohydei. With this clarification it is hoped that the "remarkable status" of D. "pseudoneohydei" (Wheeler, 1972) can now be assumed to represent a closed case.

References: Hennig, W., I. Hennig and H. Stein 1970, Chromosoma (Berlin) 32:31-63; Wasserman, M. 1962, Univ. Texas Publ. 6205:73-83; Wheeler, M.R. 1972, DIS 48:154.