attention in our work was paid to the scute mutations. Our allelomorph ($scute^2$) affects a great number of bristles, such as : all the 4 scutellars, the praesuturals, postalars anterior and posterior, supraalars ant. and post., sternopleurals - ant. and post., orbitals 1-3, verticals 2, intraocellars, mesosternals, vibrissae, genals, mentals, coxals 1,2,3, costals dorsal proximal, costals 1 and partly sternitals. When compared to the scute allelomorphs of melanogaster the scute of D. hydei is more proximate to the group of scuti longi which reduces the bristles of the B, C and D blocks (see the communications of A. S. Serebrovsky in this issue). It is of interest to note the influence of $scute^2$ upon the bristles of the genitalia, a fact never observed in melanogaster, due probably to a different structure of genitalia.

Serebrovsky, A. S. Further study on scute allelomorphs. A thorough study of a considerably greater number of bristles, controlled by the gene scute, has allowed us to divide all the bristles into four groups (blocks); the A-block, controlled by the achaete allelomorphs, and the B, C and D-blocks, controlled by the scute allelomorphs. Block A: involves the bristles: dorsocentrals, "thoracals", "trapezals", "coslals basal", "antennals external", femorals 3 ventral", interocellars, "antennals basal", subcoxals", microchaete sternopleurals, "ciliars", microgenals", frontocentrals, " femorals I, 2 and 4", "annulars", verticals I. Block B: involves the bristles: notopleurals I, praesuturals, "femorals I 1 and 3", mentals", sternopleurals an. and post., coxals, orbitals, postverticals, ocellars, postalars ant. (?), vibrissae (?), verticals (?). Block C: involves the bristles: scutellars, sternitals, "tergitals", "genitals" (?). Block D: involves the bristles: humerals, postalars post., verticals, supraalars ant. and post., notopleurals - 2. The allelomorphs of scute fall into three groups: scuti brevi, scuti medii and scuti longi. Scuti brevi (sc^5, sc^{4sh}, sc^2) affect in usual laboratory conditions the block C; scuti medii (sc^1, sc^7, sc^9, sc^{B1}, sc^{29}, sc^{2sh}, sc^{17}) the blocks B and C. sc^6, affecting the block B can also be included in the latter group. Scuti longi (sc^{L8}, sc^{s1}, sc^4) affect the block B, C and D. The longest, $scute^3$, affects all the blocks (A, B, C and D) simultaneously, thus including both scute and achaete. Finally sc^{A1} links scute and achaete, affecting the block A and B, as well as $sc^{13}(sc^1 / ac^3)$. To judge from the data of Pogossianz, Varshaver and Serebrovskaja analogous types of allelomorphs exist in D. virilis, simulans and hydei.

Shapiro, N. I. The rate of spontaneous sterile mutation. The frequency of sterile mutants, functioning in females, was studied. Recessive steriles, arising in the 2nd chromosome, were registered. The method used in the experiment prevented from mixing the newly arisen steriles with those which had been previously in the population. Among 3,841 chromosomes studied, one sterile was detected. In the same experiment 18 newly arisen lethals were detected among 3,132 chromosomes. The data obtained indicate a considerably lower frequency of spontaneous autosomal sterile mutation as compared to the lethal mutation rate.

Steinberg, Arthur G. Growth curve of Bar and wild type eye discs. Using the technique described by Medvedev the growth curves for Bar and wild type eye discs were measured. Measurements were then taken at twelve hour intervals from thirty-six hours after hatching until puparium formation. The experiments were run at $27 \pm 1^{\circ}$ C.