

REPORTS FROM THE INDIANA UNIVERSITY BIOLOGICAL STATION AT WINONA LAKE.*

a. THE INDIVIDUALITY OF THE MATERNAL AND PATERNAL CHROMOSOMES IN THE HYBRID BETWEEN *FUNDULUS HETEROCLITUS* AND *MENIDIA NOTATA*.

W. J. MOENKHAUS.

[Abstract.]

In the hybrid between *Fundulus heteroclitus* and *Menidia notata* it is possible to distinguish the chromosomes that come from each parent. The chromosomes of *Fundulus heteroclitus* are long and straight while those of *Menidia notata* are short and slightly curved. This difference they maintain in the hybrids. They can best be distinguished during the anaphases. They can not be distinguished in the resting stage. During the first two cleavages each kind of chromosome remains grouped bilaterally upon the spindle. After the second cleavage they become mingled upon the spindle, but the two kinds still retain their individuality and can readily be identified. They have been thus traced to a late cleavage stage, as far as was attempted.

b. AN EXTRA PAIR OF APPENDAGES MODIFIED FOR COPULATORY PURPOSES IN *CAMBARUS VIRIDIS*.

W. J. MOENKHAUS.

Among the crayfishes used for dissection in the laboratory we came upon a specimen that had three pairs of abdominal appendages modified for copulatory purposes. This is the first time I have ever seen such abnormality and, furthermore, have not been able to find mention in literature of a similar occurrence. I have, therefore, thought it worth while to make a note of it.

The specimen belonged to the species *viridis* and was about three inches in length. Unfortunately the specimen had been so much mu-

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