

Nevertheless, the huge series of slides does not contain a single divisional stage.

In a series of penultimate and ultimate instar aeshnid larvae, collected February-March, 1982 (De Uithof, Utrecht) for DNA photometric research, there was an ultimate instar male pertaining to this species. The adult emerged in the laboratory on May 10, and 13 Feulgen preparations were made about 30 hrs later. The gonial tissue appeared exceptionally active; both mitotic and meiotic divisions occurring in great numbers throughout the tissue. It seems, thus, that contrary to what is considered the general pattern of male odonate mitotic activity, in the adult *B. pratense* the occurrence of maturation divisions is limited to a short post-emergence period, the maturation cycle being probably completed by the time the insect takes on wings, or almost certainly so before sexual maturity has been reached. As far as I am aware, this is the first case of this phenomenon on record in the order.

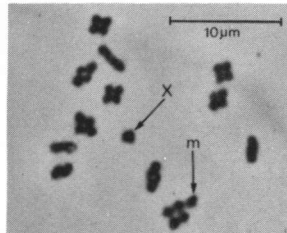


Fig. 1. (Müll.): primary spermatocyte metaphase, polar view. (Feulgen squash, 1500 X).

MEIOTIC ACTIVITY AND THE KARYOTYPE OF *BRACHYTRON PRATENSE* (MÜLL.) (ANISOPTERA: AESHNIDAE) Generally, meiotic divisions occur in the odonate males almost throughout their adult life (cf. B. KIAUTA, 1978, *Introduction to insect cytotaxonomy*, Nepal Research Center, Kathmandu). *B. pratense*, however, seems to be a remarkable exception to this rule. During a considerable number of seasons attempts have been made almost annually by the Department of Animal Cytogenetics and Cytotaxonomy, University of Utrecht to obtain the karyotype of this species, euryoecious in The Netherlands, from specimens collected on wings in the field.

The karyotype is of the usual aeshnid type, viz. $2n\delta=27$, $n\delta=14$, m . The metaphase-I bivalents are gradually decreasing in length, save for the smaller X and m , which are similar in size. The occurrence of an m -pair seems a rather characteristic brachytrine feature. In the six subfamily members on record (cf. B. KIAUTA, 1972, *Odonatologica* 1:73-102), the m -chromosomes are lacking in *Boyeria vinosa* (Say) only (cf. R.W. CRUDEN, 1968, *Can J. Genet. Cytol.* 10:200-214).

The specimen, exuviae, slides and the negatives are in the collection of the Department of Animal Cytogenetics and Cytotaxonomy, University of Utrecht.

A. Steinen, Department of Animal Cytogenetics and Cytotaxonomy, University of Utrecht, Padualaan 8, Utrecht, The Netherlands.