

between mating types of *N. crassa*.

fertility would increase with increase in amount of the medium, but differential results were obtained in the crosses (1) $Em\ A\ (P) \times Em\ a\ (s)$ and (2) $Em\ a\ (P) \times Em\ A\ (s)$ having 10 ml, 15 ml and 20 ml of medium. When $Em\ A$ was used as the protoperithecial strain, then the intensity of fertility increased with the increase in the amount of the medium (10 ml \rightarrow 15 ml \rightarrow 20 ml). But when $Em\ a$ was used as the protoperithecial strain, the reverse was the case. Again, in general, crossing plates having $Em\ A$ as the protoperithecial strain showed more fertility than did the corresponding crossing plates in which $Em\ a$ was grown as the protoperithecial strain.

From these results, one could possibly invoke an inherent biochemical difference between the two mating types of *N. crassa*. Howe and Prakash (1969 Can. J. Genet. Cytol. 11:689) postulated that fertility in *Neurospora* is being regulated by some inhibitory substance produced during the asexual process which acts at a distance from the site of origin. In our studies (Islam and Weijer 1969 *Neurospora News* 15: 24) we have found definite evidence of sexual hormones controlling the different morphogenetic steps of sexual reproduction in *Neurospora* and we could successfully isolate a group of them which were active on certain sexual morphogenetic steps. - - - Atomic Energy Centre, P. O. Box 14, Ramna, Dacca, Bangladesh.

Table 1. Synchronous production of protoperithecia. [Ho C.C. - p. 19]

