TABLE I (contd.)

Species	Chromosome No. (2n)
Reuteria irrorata (Say)	26
Ilnacora malina Uhler	26
I. stalii Reuter	26
Lopidea marginalis (Reuter)	80
L. incurva Knight	80
L. robiniae (Uhler)	80
L. lathyri Knight	80
****Melanotrichus flavosparsus* (Sahlberg)	28
Orthotylus ornatus Van Duzee	28
DERAEOCORINAE	
Deraeocoris fasciolus Knight	34
D. madisonensis Akingbohungbe	34
D. albigulus Knight	34
D. borealis (Van Duzee)	34
D. nitenatus Knight	34
D. nebulosus (Uhler)	34
D. aphidiphagus Knight	34
D. quercicola Knight	34
Hyaliodes vitripennis (Say)	34
H. brevis Knight	36
BRYOCORINAE	
Monalocoris americanus Wagner & Slater	34

This is because there seems to be some confusion in the designation of the sex chromosomes in the Miridae. This will be dealt with in detail in a subsequent paper. Systematic arrangements adopted follows that of Carvalho (1955). The table includes nine species that have previously been investigated by other authors. The numbers for seven of these have been confirmed in this study and they are referred to in the table by a single asterisk. The numbers for two species (referred to by a double asterisk) do not agree, however, with earlier reports.

Leston (1957) gave the diploid number of *A. rapidus* as 28A+xx+Y but remarked that this was questionable. In this study, at metaphase I (polar view), 14 chromosomes, including two m-chromosomes and one very big bivalent, were observed. In side view, when the chromosomes are arranged in a chain on the metaphase plate, 13 pairs were observed, suggestive of distributive pairing of the m-chromosomes, but subsequent stages of division tend to suggest a splitting of the big bivalent (which stays distinct as a single bivalent at diakinesis and metaphase I) into two to give a haploid count of 14 at telophase I. Thus the behaviour of the big bivalent and the m-chromosomes might have accounted for the variation in chromosome number of this species. Leston (op. cit.) also reported a $2n = 24$ A + X + Y for *M. flavosparsus* but a $2n = 28$ was observed in this study. This might have been due to an overlapping or capture of the two m-chromosomes in the squashes examined by Leston rather than to geographic variation.

The species investigated showed a variation from a $2n = 14$ in *C. meilleurii* (the lowest recorded so far in the family) to a $2n = 80$ in *Lopidea spp.* (the highest recorded so far in the family). In general the numbers tend to show modalities at the subfamily level for the Deraeocorinae (34), Mirinae (34) and Phylinae (32). Deviations usually involve addition or loss of one or two chromosomes, as observed by earlier investigators. However, a very anomalous situation was observed in the