

range from  $n=6$  to  $n=19$ , with the majority being  $n=9$  or  $n=10$  (CROZIER 1975; IMAI *et al.* 1977; GOÑI *et al.* 1983; IMAI, BARONI URBANI *et al.* 1984; IMAI, BROWN *et al.* 1984). In the present study, five species of *Pheidole* collected in Texas were examined (Tables 1, 2). The diploid karyotypes of *P. desertorum*, *P. hyatti*, and *P. porcula* are all similar,  $2K=20M$  (Figs. 2a-c). In some *Pheidole* spp., heteromorphic chromosomes comprise the largest pair, but homomorphics only were observed in the present study. *Pheidole sitarches campestris* and *P. tepicana* are  $2K=18M$  (Figs. 2d-f). The two longest pairs of chromosomes of *P. sitarches campestris* are ST; whereas all other chromosomes of the five *Pheidole* spp. studied are conventional M and SM.

*Tribe Solenopsidini*: A single species of this tribe was examined during this study. Eight species of *Solenopsis* have previously been studied karyologically (CROZIER 1975; IMAI, BARONI URBANI *et al.* 1984; GLANCEY *et al.* 1976; GOÑI *et al.* 1983). Three species of the subgenus *Diplorhoptrum* and five species of the subgenus *Solenopsis* have been previously karyotyped. The diploid numbers found in these groups are 22 and 32, respectively. Larvae of the southern fire ant, *Solenopsis (Solenopsis) xyloni*, were collected in west central Texas and southern Arizona (Tables 1, 2). Eleven karyotypes from two Arizona males revealed  $n=16$  and workers from both localities had  $2n=32$ . A diploid karyotype,  $2K=28M + 4A$ , is presented in Fig. 3a. The present observations confirm  $2n=32$  for the subgenus *Solenopsis*. Although the predominance of M to SM chromosomes in the karyotypes of *S. xyloni* suggests a closer affinity to *S. aurea*, *S. invicta*, and *S. saevissima* than to *S. germinata* and *S. richteri*; contradicting information (occurrence of hybrids, morphological, biogeographic and bionomic evidence) is available. *Solenopsis invicta* is one of the few Hymenoptera reported to have both haploid and diploid males (ROSS and FLETCHER 1985, 1986).

*Tribe Leptothoracini*: A single species of the genus *Leptothorax* was examined during the present study. Previously, 17 species of *Leptothorax* had been investigated cytologically (IMAI 1974; CROZIER 1975; BUSCHINGER *et al.* 1980; BUSCHINGER 1982; HAUSCHTECK-JUNGEN and JUNGEN 1983; FRANCOEUR 1986). [Note «*Leptothorax*» *provancheri* which was reported on by BUSCHINGER *et al.* (1980) is now placed in *Formicoxenus* (see FRANCOEUR *et al.* 1985)]. Reported *Leptothorax* haploid numbers are  $n=9$ , 11-13, and 15-18. B-chromosomes were reported for the Japanese species *L. spinosior* (IMAI 1974).

The genus *Leptothorax* is currently recognized as consisting of several subgenera. The species examined here is placed in the subgenus *Myrafant*. The observed karyotypes of *L. (Myrafant) rugatulus* from Arizona reveal a chromosome polymorphism of  $2n=26, 27$  (Tables 1, 2). From observations of numerous spreads, the longest pair of chromosomes is clearly heteromorphic. In the  $2n=27$  spreads, a medium sized SM is unpaired. These unpaired chromosomes were observed in somatic cells of both worker females examined. Of the nine