



Fig. 2. Number of native ant species recorded in replicate samples from 12 sites. Line is drawn through points of equal value.

year-to-year fluctuations in abundance. Table 2 gives the results for the five most common ant species at the twelve sites. There is presence/absence agreement between years for 53 out of 60 site by species comparisons.

### Habitat Preferences of *I. humilis*

Of the four types of natural habitat surveyed, only valley riparian woodland was found to contain populations of *I. humilis*. Ten out of 22 such sites were occupied by *I. humilis*. Detailed sampling of the other habitats (eight sites each of foothill riparian woodland, oak-pine woodland, and chaparral), and much additional general collecting outside the prescribed sampling program, failed to detect *I. humilis* in foothill habitats in the lower Sacramento Valley.

*Iridomyrmex humilis* was found to be rather widely distributed and locally abundant in valley riparian woodland (fig. 3). A consideration of the features of riparian sites with, and without, *I. humilis* populations (table 3) reveals the following:

- (1) *Iridomyrmex humilis* is almost exclusively confined to sites with permanent