



FIGURE 7. The relation of frequency of Stage-I species to size of the genus on New Guinea. The frequency of all genera combined in each size class is given, along with the 95 per cent confidence limits. The subfamilies included are the Ponerinae, Cerapachyinae, and Myrmicinae.

show greater latitude in nest-site choice and colony size. It is further the author's subjective impression, based on too few data to analyze quantitatively, that *individual* Stage-I species show relatively wide latitude in nest-site choice, but not in colony size.

It would be of interest now to inquire further into the conditions under which expanding species originate and spread. A valuable new clue is provided by the fact that a negative correlation exists between the size of the genus and the percentage of Stage-I species in the genus. As shown in figure 7, genera containing less than six species have a significantly higher percentage, about 58 per cent, of Stage-I species. Moreover, the number of Stage-I species that a single genus contains at the present time is correlated with the size of the genus but approaches a strict limit. As shown in table 3 and figure 8, even the largest genera (*Pheidole*, *Crematogaster*, *Strumigenys*, *Odontomachus*) have been able to generate no more than three Asia-based Stage-I species or four New Guinea-based ones. Further, there is a limit to the number of Stage-I species of any genus that coexist on a single island. On the largest of the Melanesian islands, New Guinea, only the dolichoderine genus *Iridomyrmex* has as many as seven Stage-I representatives. *Iridomyrmex* is exceptional in being Australia-based and in having Stage-I species conspicuously successful around human settlements. The largest ponerine and myrmicine genera have no more than five Stage-I representatives on New Guinea.