

the very opposite is true, since his observations, rightly interpreted, show a closer relationship between the kelep and the higher ants than has been supposed to exist among the Ponerinæ. But this is not all. Because he has never seen a nuptial flight of male and female keleps, he jumps to the further conclusion that it never occurs and that colonies of this ant can not be founded by solitary females. He says at p. 34, 'there is no provision in nature for a solitary kelep.' His whole description of the nesting habits of the kelep discloses nothing to warrant such a gratuitous assumption. As the colonies are small, their nuptial flights would hardly be noticed by the Indians of Guatemala and may, moreover, occur only during certain years or in the twilight or after dark. That they have not been seen in the colonies brought to Texas is even less surprising, as such flights among other species are celebrated only by flourishing colonies, and everything goes to show that Dr. Cook's importations are not in that condition. The large number of males which he finds suggests a high degree of fertility on the part of the workers. It does not, however, indicate colonial prosperity in these ants, but a scarcity of females. Very similar conditions have been observed by Miss Holliday² and myself in another ponerine ant, *Pachycondyla harpax* of Texas, which does not form polydomous colonies.

It is, of course, possible that the nuptial flight may not occur in the kelep, that the males may wander about and fertilize the females within the nests, and that new colonies may be formed exclusively by a process of budding or subdivision of preexisting colonies.

being actively hostile. Members of two colonies will forage on the same cotton plant or tree trunk with no signs of animosity" (p. 14).

²'A Study of Some Ergatogynic Ants,' *Zool. Jahrb. Abth. f. Syst.*, XIX., 4, 1903, p. 297, 298.