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Social organization in source and introduced populations of an invasive termite

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The social organization in colonies of the termite *Reticulitermes flavipes*, an invasive species in France, is mainly composed of extended families (colony headed by multiple related reproductives with their offspring) or mixed (colony headed by multiple unrelated reproductives with their offspring). It was recently found that *R. flavipes* populations introduced in France probably originated from Louisiana (USA). This study was carried out to determine whether the social organization of invasive populations differed from the source population. The genetic structure of *R. flavipes* in introduced (Olonne sur Mer, France) and source (New Orleans, Louisiana, USA) populations was compared by microsatellite genotyping. Analyses showed that the French population comprised two extremely large colonies, which both had a mixed-family structure, whereas for twenty small colonies identified in Louisiana, half had a mixed-family structure and half had an extended-family structure. F-statistics indicated that all colonies in both source and introduced populations contained a large number of secondary reproductive (neotenics). The social organization in the Louisiana population differed from that of most other North American populations, which usually consist of simple families with few neotenics. The social organization did not appear to differ significantly between source and introduced populations. The differences observed in termite populations native to North America are discussed.