

**OR296***Convergent evolution of Stage-I species in Camponotus***Ronald Clouse**

In his description of the taxon-cycle hypothesis, Wilson (1961) included *Camponotus (Tanaemyrmex)* in the set of genera and subgenera that produce 'Stage-I' species, which are those that disperse into outlying regions from large landmasses. What has been called *C. chloroticus* is a member of this subgenus and is indeed a widespread form throughout the Pacific. A recent collaborative effort on its systematics has shown it actually consists of two distantly related species. One lives predominantly in Micronesia, the other in Polynesia, and they overlap in Melanesia. The Micronesian species is closely related to *C. humilior* and *C. novaehollandiae* in Australia and New Guinea, and the Polynesian species is related single-island endemics in Micronesia, including *C. eperiamorum* on Pohnpei and what has been called *C. irritans kubaryi* on Palau. Both species favor marginal habitats, have large ranges, and are the most recently evolved species in their respective lineages (originating < 5 Ma). These features are consistent with those predicted for species engaged in the expansion phase (Stage I) of the taxon cycle. The species are not, however, consistent with the idea that expanding lineages originate on large landmasses, as the Polynesian species appears to have diversified down from Micronesia, and the Micronesian species up from Vanuatu. In addition, some Pacific members of the subgenus are clearly not Stage I, and some appear to have colonized from the New World, not nearby large landmasses in Southeast Asia. The remarkable morphological convergence of these two forms is described and future attention is directed to the connections between morphology, behavior, and ecology in this group. This result also raises questions about resource partitioning between the two forms in Melanesia, where they overlap.