

The relation between colony structure and level of threat posed by *Solenopsis invicta*

To predict the threat posed by an invasion of this ant it may be useful to determine the type of colony structure of the specific introduced population. This is because although red imported fire ant colonies may be either uniclonal or multiclonal, a uniclonal colony is more likely to reach high local densities and dominate habitats (Holway *et al*. 2002; Ness and Bronstein 2004; McGlynn 1999). “Uniclonal” refers to the social structure of an ant colony, and is used to describe the cooperation of several ant nests (each with its own queen) to provide food, resources and care for individuals in all nests. This multi-nest (polydomous) and multi-queen (polygynous) structure increases the probability of colony survival, because the unit as a whole has access to a larger variety and number of resources at any time, and is able to use surplus resources more effectively. In contrast “multiclonal” colonies are monodomous and monogynous (one nest, one queen) and consist of workers that attend to and provide for only one queen and her nest. Such colonies have less access to potential resources and may be less resilient (McGlynn 1999). In multiclonal colonies the workers defend one queen and exhibit high aggression, defend the nest from other colonies. These colonies may also aggressively and episodically raid the nests of other ant species. The competitive pressure in uniclonal colonies, on the other hand is lower with the workers cooperating as a “supercolony” to recruit food items (Ness and Bronstein 2004; McGlynn 1999).