

Applying the ALL Protocol

Selected Case Studies

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Although the ALL Protocol put forward in this book was only recently developed and is published for the first time here, it is derived from the experiences of many myrmecologists and from numerous studies of ant diversity over the years. Before the development of this protocol, studies of ant diversity utilized a wide variety of methods, as described in Chapter 9. The ALL Protocol is the result of an extensive evaluation of these methods in different countries and under a variety of conditions. The studies by Delabie et al. (Chapter 10) provided the strongest data for choosing methods for the ALL Protocol, but a number of other key studies were also influential in its development.

Brief descriptions of these key studies, from diverse parts of the world (Madagascar, Malaysia, India, and Brazil), are provided here to

illustrate how the two principal collecting methods of the ALL Protocol (leaf litter extraction using the Winkler technique and pitfall traps) compare, and how they have been used successfully in a variety of biodiversity studies, particularly to measure ant diversity and to detect habitat change. Full descriptions of these studies are presented in Agosti et al. (2000).

Madagascar

A series of studies in Madagascar by Fisher and colleagues (Fisher 1996a, 1996b, 1998, 1999a, 1999b; Fisher and Razafimandimby 1997; Fisher et al. 1998) provides the best insight into the usefulness of the ALL Protocol and the comparative value of its two principal methods, Winkler extraction and pitfall traps. In one