collected lizard sample would include observations that note where the lizard was found, such as on a particular named sort of rock outcropping (also sampled), that the collector (scientist or local expert) has said that local experts report that this type of lizard is known to frequent particular forest patches (indicator species sampled), that this type of forest patch is found across a named vegetation zone (indicator species sampled), and that the name of the lizard carries a meaning associated with its use as a food to be consumed in a particular place and time (timing determined within local reckoning). Important types of observational data that have long been recorded by biologists and ethnobiologists that need the help of linguists are the vernacular names and their associations (including metaphorical allusions) and other cultural data recorded on specimen labels associated with primary evidence. Far too many scientists rely too much on the primary evidence to speak for itself, and miss the opportunity to provide critical observations, particularly from emic perspectives.

## 12.1.3 Comparative ethnobiology

While ethnobiologists consider it desirable to produce data sets that can eventually be comparable in multisite analyses (Reyes-García et al. 2005), some researchers have conducted comparisons within their data collection and analysis efforts. For example, Nguyen (2006) studied food plant assemblages used by Vietnamese in Vietnam and Hawaii, analysing patterns of evolutionary change in plant constituents as people migrated to new environments. Furthermore, she discussed interconnected roles of botanical and linguistic evidence in understanding human interactions with complex environments (e.g. natural and artificial ecosystems, and other multi-species interactive systems).

## 12.1.4 Ethnobiology ethics and legal issues

The collection of ethnobiological data, whether it is primary, secondary, or tertiary, has increasingly become the focus of ethical and legal discussions (Laird 2002; see also Rice and Newman, Chapters 18 and 19 below). The most extreme concerns have been fear of bio-piracy, commercialization of traditional knowledge, or the misuse/mismanagement of information that is shared with researchers. Ethical and legal matters are tightly intertwined.