

## Biogeographical and Evolutionary Considerations

Strong inferential methods in biogeography, such as vicariance biogeography (e.g., Wiley 1988), are unfortunately data costly as they rely on congruence of  $\geq 2$  phylogenetic hypotheses expressed as area relationships. A single phylogenetic hypothesis can be interpreted readily as an area cladogram (i.e., taxa are substituted by their respective areas in a cladogram), but any biogeographic pattern is supported at best only by individual speciation events. The following account on historical biogeography is intended to reflect general patterns within *Corydalus* evolutionary history. It relies on the structure of the phylogenetic trees, and so a better and more complete understanding of *Corydalus* phylogeny may falsify all or part of it. Biogeographical provinces are those proposed by Cabrera and Willink (1980), and were used when species distributions correlated fairly well with them. Occasionally, general physiographic terms or geographic names were used.

**Descriptive Biogeography of *Corydalus*.** All 3 genera of American dobsonflies are endemic to the New World. *Platyneuromus* is restricted to Mexico and Central America. *Chloronia* is found in Mexico, Central and South America, and the Lesser Antilles. *Corydalus* is the most widespread, occurring from southeastern Canada south through most of North America, Central America, and a large portion of South America. It is absent from the Greater and Lesser Antilles, and roughly from most of southern South America including the Chilean, Subantarctic, Patagonian, and southern half of Pampean Provinces. The majority of *Corydalus* species are South American (*C. cephalotes*, *C. hecate*, *C. ecuadorianus*, *C. colombianus*, *C. ama-*