A review of results from recent Caribbean biogeography studies. The studies involve a variety of families and genera with members in the Caribbean. They include an assortment of geographical distributions, number of species included in the study, data types, and analyses used. The results are also varied in the number of distributions necessary and the process of distribution concluded. The combined analysis of these results with many more systematic and biogeographic studies conducted on plants in the Caribbean and with physical and climatic histories of the region will aid in producing a model of ecosystem evolution (Graham 2003).

Plant Group	Distribution	# of taxa	Type of data used for tree reconstruction	Method of biogeographic inference	Number of distribution events	Process of distribution reported	Reference
Lyonia sect. *Lyonia* (Ericaceae)	G. A.	25	morphological characters	area cladogram using Brooks Parsimony Analysis	unclear	mixture of dispersal and vicariance	Judd (1981, 1995, 2001)
Sabal (Arecaceae: Coriphoideae)	s. US, Mexico, and n. C. Am., G. A.	15	morphology, leaf anatomy, and flavonoid phytochemistry	patterns of phylogenetic relationships and distributional data	multiple	over-water dispersal	Zona (1990)
Mercranium (Melastomaceae)	G. A.-endemic	16	morphological, anatomical, phenological, and cytological	patterns of phylogenetic relationships and distributional data	multiple	tectonic events, dispersal, and climate	Skean (1993)
Poitea (Fabaceae: Robinieae)	Antillean-endemic	12	morphological, and chloroplast DNA restriction site data	geohistory outlined by Rosen (1976 & 1985), Pindell and Barrett (1990), and Perfit and Williams (1989)	one colonization of the Antilles	dispersal	Lavin (1993)
Bactris (Arecaceae)	Neotropics	60	morphological and anatomical characters	phylogeny, distribution, models of geological evolution	unclear	vicariance and dispersal	Salzman and Judd (1995)
Exostema (Rubiaceae)	Neotropics	25	morphological data, ITS, and *rbcL*	patterns of phylogenetic relationships and distributional data	multiple	vicariance and dispersal	McDowell et al. (2003)
Erithalis (Rubiaceae)	W.I., Mexico, Honduras, Venezuela, and Brazil	8-10	*trnL-trnF*, ITS and ETS	patterns of phylogenetic relationships and distributional data	in situ origin in Antilles	ancestral dispersal	Negrón-Ortiz and Watson (2002, 3)
Goetzeoideae (Solanaceae)	Antilles and S. Am.	6	nuclear and chloroplast sequence data	phylogeny, geological knowledge, and history of the group	one	colonization from S. Am.	Santiago & Olmstead (2003)
Pictetia (Fabaceae)	G. A.	8	morphological and ITS	patterns of phylogenetic relationships and distributional data	multiple	ancient distribution from C. Am. plus dispersal	Beyra M. and Lavin (1999)
Ginoria (Lythraceae)	Antilles and Mexico	16	morphology	patterns of phylogenetic relationships and distributional data	uncertain	uncertain	Graham (2002, 2003)
Styrax sect. *Valvatae* (Styracaceae)	Antilles	4	ITS	patterns of phylogenetic relationships and distributional data	three	dispersal	Fritsch (2003)
Cuphea (Lythraceae)	G.A.	15	morphology and nuclear ITS	patterns of phylogenetic relationships and distributional data	8-11	dispersal	Graham (2003)
Catesbaeeae-Chiococceae (Rubiaceae)	G. A. (70%), C. and S. Am., and w. Pacific	190	ITS and *trnL-trnF*	patterns of phylogenetic relationships and distributional data	one or two	dispersal	Motley et al. (2005)

Beyra M., A. and M. Lavin. 1999. Monograph of *Pictetia* (Leguminosae-Papilionoideae) and review of the Aeschynomeneae. Syst. Bot. Monogr. 56:1-93.

Fritsch, P. W. 2003. Multiple Geographic Origins of Antillean *Styrax*. Systematic Botany 28(2):421-430.

Graham, S. A. 2002. Phylogenetic relationships and biogeography of the endemic Caribbean genera *Ginoria, Haitia,* and *Crenea* (Lythraceae). Carib. J. Sci. 38:195-204.

Graham, S. A. 2003. Biogeographic patterns of Antillean Lythraceae. Syst. Bot. 28:410-420.

Judd, W. S. 1981. A monograph of *Lyonia* (Ericaceae). J. Arnold Arb. 62:63-128.

Judd, W. S. 1995. 13. *Lyonia* Nuttall. Pp. 222-294 in: Luteyn, J. L. (ed.), *Ericaceae Part II – The Superior-Ovaried Genera.* Flora Neotropica Monograph 66, New York Botanical Garden, Bronx, New York.

Judd, W. S. 2001. Phylogeny and Biogeography of *Lyonia* sect. *Lyonia* (Ericaceae). Pp. 63-75 in: Woods, C. A. and F. E. Sergile (eds.), *Biogeography of the West Indies*. *Patterns and Perspectives*, ed. 2. CRC Press, Boca Raton.

Lavin, M. 1993. Biogeography and systematics of *Poitea* (Leguminosae). Syst. Bot. Monogr. 37:1-87.

McDowell, T., M. Volovsek, and P. Manos. 2003. Biogeography of *Exostema* (Rubiaceae) in the Caribbean region in light of molecular phylogenetic analyses. Syst. Bot. 28:431-441.

Motley, T. J., K. J. Wurdack, and P. G. Delprete. 2005. Molecular systematics of the Catesbaeeae-Chiococceae complex (Rubiaceae): flower and fruit evolution and biogeographic implications. Amer. J. Bot. 92(2):316-329.

Negrón-Ortiz, V. and L. E. Watson. 2002. Molecular Phylogeny and biogeography of *Erithalis* (Rubiaceae), an endemic of the Caribbean Basin. Pl. Syst. Evol. 234:71-83.

Negrón-Ortiz, V. and L. E. Watson. 2003. Hypotheses for the colonization of the Caribbean Basin by two genera of the Rubiaceae: *Erithalis* and *Ernodea.* Syst. Bot. 28:442-451.

Salzman, V. T. and W. S. Judd. 1995. A revision of the Greater Antillean species of *Bactris* (Bactridinae: Arecaceae). *Brittonia* 47:345-371.

Santiago-Valentin, E. and R.G. Olmstead. 2003. Phylogenetics of the Antillean Goetzeoideae (Solanaceae) and their relationships within the Solanaceae based on chloroplast and ITS DNA sequence data. Syst. Bot. 28:452-460.

Skean, J. D. 1993. Monograph of *Mercranium* (Melastomataceae-Miconieae). Syst. Bot. Monogr. 39:1-116.

Zona, S. 1990. A monograph of *Sabal* (Arecaceae: Coryphoideae). Aliso 12:583-666.