Bromeliads Cloudbridge Nature Reserve - Nature Notes No. 7

Bromeliads are the bright-flowered spiky-leafed plants one sees growing in the trees. Most bromeliads are epiphytes (air plants) but some are terrestrial. Costa Rica has more than 2,000 different species of bromeliads, the richest deposit of such in Central America. Most of Costa Rica's bromeliads are found in the rain forests and higher-altitude cloud forests.

bromeliad at poas feb 04 In Costa Rica, the Tillandsioideae subfamily of the Bromeliaceae family is the most abundant. Within this group, many of the Vriesia species are endemic to this area, found exclusively in the Cordillera de Talamanca.

Epiphytic bromeliads are not parasites — they must find their own food and water without relying on the tree. Many bromeliad leaf surfaces are covered with small, flat scales attached in the center. These scales absorb humidity form the air. In bromeliads of moist forests — such as those of the Talamanca cloud forest — it is common to find a pool of water in the base of the plant. This provides a fertile reproductive environment for insects such as mosquitoes, and for tiny frogs.

Plant material and drowned non-aquatic insects in turn provide nutrients for the host plant. Decomposition by bacteria and fungi breaks down these materials to simpler ones which can be absorbed by the plant.

