Reproductive biology of *Aechmea blanchetiana* (Baker) L.B.Sm (Bromeliaceae) in Restinga of Guriri, São Mateus/ES, Brasil. RIBEIRO, Izabela Ferreira; Menezes, Luis Fernando Tavares & Matallana, Gloria

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Aechmea blanchetiana, found in Restinga of Guriri, São Mateus/ES Brasil presents self-compatibility and mixed reproductive strategies from the index of self-compatibility (1.49) and self-incompatibility (1.40), considered almost five times the number limit for the self-compatibility. The Kruskal Wallis statistical test confirms the indices with a $p>0.05$. The species is considered ornithophilous, with a nectar volume of 5.6 µl and sugar concentration above 33%, expected for species visited by hummingbirds. In 20 hours of observation the following animals were recorded as pollinators: hummingbirds, *Thalurania glaucopis* (Gmelin 1788), *Eupetomena macroura* (Gmelin 1788), *Amazilia fimbriata* (Gmelin 1788) and *Amazilia* sp.; moths, *Lychnuchoides oazis oazis* (Hewitson 1878); and butterflies, *Heliconius erato* (Linnaeus 1758) and *Phoebis* sp. All are considered effective pollinators, pointing that the species present secondary pollination syndromes. The viability of the pollen in *A. blanchetiana*, above 88%, suggests that the species has more viable pollen grains per flower bud. The penetration of eggs occurred in all treatments of either 24 or 48 hours and highly successful germination of seeds ocurred in all treatments, with no observable statistically significant difference between the treatments ($p> 0.05$). From these results the species appears able to persists in the Restinga de Guriri regardless of the reproductive strategy used. **Funding**: FAPES. **Key-words:** Bromeliaceae; Pollination Syndromes; Self-compatibility

Pollination ecology of *Lymania azurea* (Bromeliaceae): an endemic and threatened species from the Atlantic Rainforest. ROCCA, Márcia[(1)] & Marinho, Felipe[(2)]

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Lymania azurea is an epiphyte or a terrestrial species, occurring aggregately in the Atlantic Rainforest understory in southern Bahia. This species flowers from September to November, displaying mostly an intermediate annual pattern of flowering. But surprisingly, one individual (genet) produced two inflorescences (each one on a different ramet) in an anthropogenic forest edge (a road) during the same year. It may open from two to four flowers per individual. Its inflorescence may bare 30 to 208 floral buds, with plants in the understory bearing fewer flower buds than plants near the forest edge. Flowers are tubular,

the effective corolla is 1.2 cm long, petals are white to blue, and the calyx is green. There is no marked scent. By the end of the morning (1100-1200h), nectar volume and sugar concentration were 13.3µL (± 3.5) and 29.0% (± 4.5), respectively. Anthesis begins at 0230h and it takes about 14 h. *Lymania azurea* is predominantly self-incompatible, therefore it is highly dependent upon pollinators to ensure its reproductive success. A few hummingbird species were observed visiting its flowers, and *Phaethornis ruber* (Trochilidae) was the principal pollinator, making 77% of legitimate visits and taking pollen loads on the bill. Bees were also observed visiting flowers: the long-tongued bee *Bombus* (*Fervidobombus*) *morio* was considered a secondary pollinator if present and short-tongued bees were always pollen thieves. Mites were also observed and could interfere in exclusion experiments, transferring some pollen and producing a few seeds in bagged flowers. Fruits without seeds were also produced (probably at the very beginning of the reproductive season when few plants are in flower and available as mates) and they may improve the overall dispersal of seeds in the understory. Even though, almost whole infructescences were observed, with berries left behind and ignored, already dry near the forest edge. More light at forest edges gives more energy to plants and individuals of *L. azurea* may transfer this input into reproductive output, producing more buds, flowers, and seeds, allowing for cross pollination to occur. In spite of this, limitation in dispersion may occur in this species in forest edges. **Funding:** FAPESB, FAPITEC/SE. **Key-words:** Reproductive Phenology; Floral Biology; Floral Visitors

HPLC analysis of Bromeliaceae species with therapeutic activity for the development of herbal medicines. ROLIM, Larissa Araújo

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Some species of the Bromeliaceae family are widely distributed in the Brazilian semiarid and are used by the local population as an excellent source of hard fiber. Such uses include that by artisans of the San Francisco Valley region for the manufacture of wicker baskets, by the textile industry and by landscapers as ornamental plants. In addition, these species are quite often fed to goats, which with the predatory extraction of man, leads to the condition of endangered species. It was decided, therefore, to investigate *Bromelia laciniosa*, *Encholirium spectabile* and *Neoglaziovia variegata* before they become extinct without their chemical and pharmacological properties being known. Considering the large number of species of this family, few of them have been studied chemically yet. Nevertheless, there is a considerable amount of identified compounds, which mainly belong to the classes of flavonoids and triterpenoids related to various pharmacological activities. Work developed by the