

Orchid legislation in Santa Catarina, Brasil

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The state of Santa Catarina, with an area of 95,346,181 km², represents only 1.19% of Brazilian territory. It has lush vegetation, formed by different biomes. In light of these biomes, Florianópolis -- the capital of the state and location of the island of Santa Catarina -- has always been regarded as a natural nursery. For the past 80 years this feature has made the state and its orchids coveted by individuals and companies, mainly from Europe and the USA (as well as Brazil itself), in search of wealth in the quantity and quality of our orchids. To prevent this, the state, the city of Florianópolis, and some other cities of Santa Catarina have passed a set of laws seeking the preservation, maintenance, knowledge, and environmental education for the Orchidaceae of Santa Catarina, described as follows:

- Law No. 203/1954 - Regulates trade in orchids in Florianópolis
- Law No. 1480/1976 - Declares Public Utility Orquidófila Society of Santa Catarina

- Law No. 6.255/1983 - Declares *Laelia purpurata* the flower of Catarina State
- Law No. 13.054/2004 - Declares Public Utility Federation Orquidofilia Santa Catarina
- Law No. 7.073/2006 - Declares *Laelia purpurata* the flower of Florianópolis
- Law No. 8.228/2010 - Provides for the creation of the Orchid City of Florianópolis
- Law No. 15.177/2010 - Establishes Orchid Day in the State of Santa Catarina, to be celebrated June 22, the birthday of botanist João Barbosa Rodrigues
- Law No. 8479/2010 - Establishes Orchid Day in the Municipality of Florianópolis, to be celebrated June 22, the birthday of botanist João Barbosa Rodrigues

These laws, available at www.orquidarionsdodesterro.com.br, may serve as positive examples for environmental groups, orchid circles, and local governments.

Orchidaceae) en Bogotá D. C. y su área de influencia

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Masdevallia caudata Lindl. is an epiphytic orchid with distribution in Colombia. This species has ornamental potential but is threatened and has not been studied to substantiate its use and conservation. During our research we visited ten communities and found eight populations in three communities. Horizontal and vertical distribution and its phenological state were studied and a distribution map made. Dried specimens were deposited in the Herbarium of the Jardín Botánico José Celestino Mutis (JB-JCM). Wild individuals were collected in order to study adaptation, maintenance protocol, observations of *ex situ* breeding phenology

(biology and floral formula, longevity, and artificial pollination), and asymbiotic propagation *in vitro* in the Botanical Garden José Celestino Mutis (JB-JCM). The population analyzed *ex situ* consisted of 28 individuals. Reproductive phenology was observed and documented over a period of eight months. The flowering period was around 24 weeks with flowering peaks in weeks 11 and 26. In addition, flowers that were pollinated yielded a viable fruit set in a 26.31%, the most effective from geitonogamy and xenogamy. Fruit ripening occurred over approximately 151 days. Asymbiotic propagation of seeds obtained by different methods of natural or

artificial pollination was carried out. Seeds optimally germinated on Murashige and Skoog medium to 50% with activated charcoal (AC) and Knudson C with AC and 1 mg/L of NAA, GA3, and kinetin.

Orquideas de los bosques de niebla del suroccidente de Colombia y oportunidades para su conservación

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Basado en inventarios realizados en bosques de niebla del suroccidente colombiano, en los departamentos de Nariño, Valle del Cauca y Antioquia, se se reporta un total de 420 especies de 85 géneros; una concentración marcada de especies endémicas que representa un 30% del número total de especies registrado, diez y siete nuevos reportes para Colombia, y veinte especies nuevas para la ciencia de estos bosques en años recientes. También hay 25 especies amenazadas de las mencionadas en el Libro Rojo de orquídeas de Colombia. Para la conservación de estas orquídeas se han establecido recientemente reservas naturales privadas como Morobia, municipio de Dagua, Peñas Blancas, municipio de Cali y La Irlanda, municipio de Jamundí en el Departamento de Valle del Cauca. En el departamento de Antioquia se estableció la reserva La Mesenia en el municipio de Jardín. La reserva natural privada La Planada en el municipio de Ricaurte, Departamento de Nariño se convirtió en reserva de la comunidad indígena Awa administrada por el Resguardo CAMAWARI. Las reservas naturales mencionadas integran sus esfuerzos de conservación de orquídeas con los de manejo de cuencas hidrográficas, ecoturismo, servicios ambientales y adaptación al cambio climático.

Medicinal orchids of India and conservation measures for their sustainable management

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Orchids are the most pampered plants for their aesthetically beautiful flowers. and these constitute one of the highly evolved families of economically important plants, the Orchidaceae. Being rich in alkaloids, flavonoids, glycosides, and other phytochemicals, these plants have been used in the local system of medicine in different parts of the world since time immemorial. Numerical strength of orchid species in India has been catalogued as nearly 1,200 species; these are variously adapted to terrestrial, epiphytic, achlorophyllous, and mixed habit (as terrestrial and lithophytes) mode. In fact, Indian orchids have been used extensively in various indigenous systems of medicine since the Vedic period, and in the Vedic scriptures there is a mention of these plants under the name *Vanda*. Some of the orchid herbs including *Malaxis acuminata*, *M. muscifera*, *Habenaria edgeworthii*, and *H. intermedia* are highly valued in Ayurvedic system of medicine. The orchids have been reported to cure many ailments including cardiac (*Eulophia dabia*), dysentery (*Satyrium nepalense*), malignancy (*Vanda testacea*), nervous (*Dendrobium nobile*), orthopedic (*Dactylorhiza hatagirea*), respiratory (*Dactylorhiza hatagirea*), and rheumatism (*Rhynchosytilis retusa*) disorders. A large proportion of orchid habitats have lost their character due to expanded agricultural and other developmental activities. Further, unregulated commercial collections have also affected the size and frequency of natural populations of several medicinally important orchid species. Though extensive research work is pursued on medicinal plants, in general, orchids