

# MUST-KNOW ABOUT ORCHIDS

There are more than 25,000 orchid species on earth!<sup>1,2</sup>

Orchids grow almost everywhere. However, most of the diversity is concentrated in the old and new tropics. For instance, Northern Andes Cordillera in South America hosts about 25% of all orchid species<sup>3</sup>.



Photos: O. Pérez

## Orchids are endangered<sup>4</sup>

Orchids often have restricted geographical distributions<sup>5</sup>. Habitat loss (e.g. due to deforestation) is driving them to extinction<sup>4</sup>. For example, about 79% of all temperate slipper orchids (*Cypripedium*, 57 spp.) are threatened of extinction<sup>6</sup>.



*Cypripedium* sp. | Photo: O. Pérez

## Orchids are economically important<sup>7</sup>

The striking beauty of orchid flowers place them as top-priced ornamental plants<sup>8</sup>. Beyond their beauty, orchids are also important for the food (Vanilla), medicinal and cosmetic industry<sup>7</sup>. Some orchids make part of traditional medicine in India and China<sup>9</sup>.



*Dendrobium* sp. | Photo: O. Pérez

## Largest orchid flower

Flowers of *Coryanthes macrantha* can reach up to **100 grams**<sup>10</sup>. Plants of *Coryanthes* are distributed in lowland wet forest of Central and South America. They grow in so called „ant-gardens“, which can reach up to 150 cm in diameter<sup>11</sup>.



Photo: G. Gerlach



Plant of *Coryanthes* growing on an ant-garden | Photo: O. Pérez

## Orchids evolved amazing pollination mechanisms!

Orchids rely mostly on animals to carry on pollination<sup>12</sup>. The mechanisms by which this process takes place are jaw-dropping and almost unique<sup>13</sup>. They include fragrance-reward<sup>14</sup>, sexual<sup>15</sup> and brood-site deception<sup>16</sup>. Orchid adaptation to various pollinators is a beautiful illustration of evolution.



*Euglossa* male bee visiting flowers of *Cynoches guttulatum* in Panama | Photo: O. Pérez

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