

## ***e-pollinaria*. The orchid pollinaria collection at the Lankester Botanical Garden**

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The diversity of Orchidaceae is in part the result of its complex zoophilous relationships and coevolutionary adaptations with pollinators. Orchid pollen is frequently associated to other structures, forming functional units to facilitate its transport between flowers, called pollinaria. Pollinaria present a broad array of structures and shapes, whose morphology constitutes a tool for species identification, bringing information about the natural history of the orchid groups and helping in the reconstruction of evolutionary lineage hypotheses. A direct comparison of pollinaria from previously identified species could greatly simplify species identification. However, pollinaria represent a huge challenge when it comes to being preserved, as they undergo severe distortions during dehydration, and are commonly affected by fungi that deteriorate the structures.

Before being stored in ultra-cold, pollinaria at the LBG are documented with high-resolution microphotographs, which provide information almost equivalent to that of fresh vouchers. Each series of images is associated with a technical sheet, including morphological description and measurements of pollinaria, allowing searches for specific morphological characters. A set of quality images, *e-pollinaria*, representing a broad spectrum on Neotropical orchid genera and species, will be soon provided through the net to researchers worldwide for potential application in various disciplines such as ecology, biology, entomology and paleobotany.