

Cultivating Orchids May Help Conserve Wild Species in China

Over-exploitation of economically valuable species is a major threat to biodiversity. Few studies have investigated the role of consumer behavior in driving over-exploitation of rare, wild species in the lucrative horticultural trade.

Dr. Sophie Williams, a postdoc of Xishuangbanna Tropical Botanical Garden (XTBG), and her collaborators conducted a study to investigate consumer preferences for particular attributes of ornamental plants. They took a targeted approach, focusing on the Chinese market for orchids.

To quantify the role of consumer preferences for wild orchids in China's horticultural market, they used conjoint analysis to determine which attributes are preferred by orchid owners and non-owners in two socio-economically contrasting areas of South China.

Working in two very different locations in China, Xishuangbanna, a sparsely populated rural area in southwest China, and Hong Kong, a densely populated metropolis, researchers found that consumer preference was not driving demand for wild or rare orchids in Chinese flower markets.

Across both study sites, price and color were found to be the most important attributes. Whilst a slight preference for wild plants was detected at Xishuangbanna, plant origin was the last. Other factors, primarily cost and flower color, took precedence in driving choice.

The researchers also measured awareness of orchid import regulations. The majority of consumers in their sample did not know what the Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES) is, or how it applies to different orchid groups.



This suggested that most people who purchase orchids may not be aware of the issues related to the illegal trade in wild plants. Consumers just want cheap colorful flowers and would be just as happy buying cultivated plants.

The findings showed that trade in wild ornamental orchids in South China is supply-driven.

The researchers thus suggested that the best way to conserve wild orchids might be to strengthen enforcement of existing regulations to prevent wild plants being sold, and support legal businesses selling sustainable commercially grown orchids.

Their paper entitled "Using consumer preferences to characterize the trade of wild-collected ornamental orchids in China" has been published in *Conservation Letters*. (Text by Sophie J. Williams)