

E-COMMERCE: A NOVEL INTRODUCTION PATHWAY FOR CULTIVATED ALIEN PLANTS WITH HIGH INVASION POTENTIAL IN CHINA

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Study Description

Booming E-commerce provides a novel pathway for the introduction and spread of cultivated alien plants in China. However, few studies have compared the online-nursery trade of cultivated alien plants with different invasion statuses. Our work found that naturalized non-invasive and invasive taxa were more likely to be for sale and to be available from more online nurseries as seeds, compared to non-naturalized alien taxa. Naturalized and invasive plants may thus spread further in China. Based on our findings, we suggest that the implementation of plant-trade regulations and a monitoring system for the online horticultural supply chain will be essential.

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Photo 1. Over 13,718 alien plants have already been introduced in China for cultivation, and 987 of them are traded via online plant nurseries on 1688.com. The photograph shows a typical cultivated alien plant native to Central America, *Monstera deliciosa* Liebm., which has now been sold in at least 67 online nurseries on 1688.com. Photo credit: Ran Dong.



Photo 2. Cactaceae and Crassulaceae are two of the most popular families of cultivated alien plants that are available on I688.com. There are 183 taxa from these two families (the information was accessed 29 July – 15 August 2019). However, only 19.3% of them are naturalized and/or invasive, because most of them have only a short introduction history (34 years on average) and lack climatic suitability (2.4% on average). Photo credit: Ran Dong.



Photo 3. *Sphagneticola trilobata* (L.) Pruski is one of the 46 invasive cultivated plants that are available on 1688.com. Due to its fast growth and reproduction capabilities, as well as its adaptation to the local environment, this species is considered one of the most invasive in China. Even so, it is still being traded and used for urban greening. Photo credit: Zhi-Cong Dai.

These photographs illustrate the article “Cultivated alien plants with high invasion potential are more likely to be traded online in China” by Ran Dong, Bi-Cheng Dong, Qiu-Yue Fu, Qiang Yang, Zhi-Cong Dai, Fang-Li Luo, Jun-Qin Gao, Fei-Hai Yu, and Mark van Kleunen published in *Ecological Applications*. <https://doi.org/10.1002/eap.2811>.