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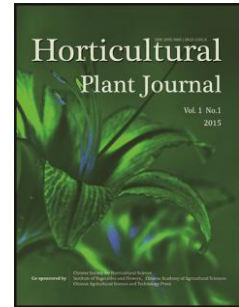
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# Germplasm Diversity of Chinese Kale in China

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## Abstract

Chinese kale is an important vegetable crop in China, especially in South China where the majority of varieties are grown. It originated in South China and spread throughout Southeast Asia thereafter. Chinese kale can be classified into two types according to whether the petals are white or yellow in color. There are also three main cultivated types based on the edible organs, including the stalk and leaf type, the stalk type, and the leaf type. Two primary types have also been defined based on stalk color, including green stalks and red stalks. They are also cultivated based on the type of stalk, including main stalk and lateral stalk types. Significant differences have also been observed in glucosinolate content among the varieties, and a 40-fold difference in neoinole-3-methyl glucosinolate was detected across the cultivars.

*Keywords:* Chinese kale; *Brassica alboglabra* Bailey; diversity

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## 1. Introduction

Chinese kale was first taxonomically named by Bailey (1992). However, Bailey had only been familiar with the white petal variety, and had not discovered the yellow petal variety. Thus, he named Chinese kale *Brassica alboglabra* Bailey (*albo*, from the Latin *albus*, means “white”). Chinese kale originated in South China and spread to Southeast Asia (Yui, 1998). South China is the global center of diversity of Chinese kale; a cultivar of *Brassica oleracea* L. that includes many commonly cultivated foods such as broccoli and cabbage. Gomez-Campo (1999) believes *Brassica oleracea* was cultivated in South Italy, and probably reached China from the Mediterranean region. Chinese kale is mainly cultivated in South China, particularly in Guangdong Province, followed by Guangxi, Fujian, and Taiwan. It was introduced into East and North China in the early of 21st century. It spread to Southeast Asia in the 20th century, particularly Japan (Yui, 1998). South China remains the global center of diversity of Chinese kale. Few scientists outside of China have studied Chinese kale, and not many reports are available on the diversity of Chinese kale.

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