

Title Transgenic approach to improve quality traits of melon fruit  
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### **Abstract**

Melon is one of the economically important and widely cultivated vegetable crops in the world. There is a wide genetic diversity in the cultivated and wild species of melon. Melon as one of the most consumed fruits, the development and ripening of fruit is known to be a complex developmental process that involves many biochemical and physiological changes including the breakdown of chlorophyll, degradation of the cell wall, increase in sugars content, alteration in pigment biosynthesis, and the accumulation of flavour and aromatic compounds. However, the information on genetic engineering and molecular biology of melon is very limited. With the development of genetics and molecular biology, a large number of quality/ripening-regulated genes involved in pigmentation, vitamin, soluble carbohydrate metabolism, cell wall metabolism and ethylene biosynthesis have been identified in melons. Some genetic manipulations of melons have been proved to be useful technology to improve quality, sensory attributes, shelf life and other agronomic traits of melon fruit. This paper reviewed some progresses in the transgenic approach to improve quality traits of melon fruit.