

**Title** The development and current status of modified and controlled atmospheres in Mexico  
**Author** E.M. Yahia  
**Citation** ISHS Acta Horticulturae 857:433-440. 2010.  
**Keyword** Mexico; MA; CA; storage; transport; packaging; research; foods; fruits; vegetables

### **Abstract**

This paper will discuss the development of research and commercial application of modified (MA) and controlled (CA) atmospheres in Mexico during the last 3–4 decades and their current status. MA and CA are used in Mexico for storage, transport and packaging of different food items, including horticultural crops. CA for storage is strictly used for apples since 1980, but suffered significant increase and improvement in the last 10 years. Currently there is an approximate capacity to store about 120,000 tons of apples annually, equivalent to 24% of the apple produced in the country, and 42% of the total storage capacity for this fruit. The first sea shipments of Mexican horticultural crops (mango shipments to Japan) in MA were done in 1974, and currently significant quantities of avocados, mangos, limes, among other fruits, are shipped to Europe and Asia in MA and CA. The changes in the evolution of the MA/CA technologies/companies, especially in the last 2 decades, are very striking and the story interesting. Modified atmosphere packaging (MAP) is used for different types of foods, but its application for horticultural crops is still very limited to small quantities of salads. Research activities in the country include MA, MAP, CA storage and insecticidal CA.