

#### Abstract:

On July 17, 2002, AgroFresh Inc. obtained EPA registration for SmartFresh™ Technology containing 1-methylcyclopropene (1-MCP) for use in apples, pears, avocado, tomato, melons, peaches, nectarines, plums, apricots persimmons, kiwifruit, papaya and mango. AgroFresh™ Inc. commercially introduced 1-MCP as SmartFresh early in 2002 in Chile and Argentina and will introduce the technology in the Fall of 2002 to the US apple packers as a new innovative postharvest tool to maintain high fruit quality during cold storage, transit and market supply channels. In preparation for commercial introduction, AgroFresh, Inc. along with Washington State University conducted 80 demonstration trials at 34 different apple packers in the state of Washington over the 2001-2002 storage season. 1-MCP combined with controlled atmosphere (CA) storage consistently provided the highest firmness as well as titratable acidity and soluble sugars after 6 months storage plus 7 days ripening at room temperature. Results from 1-MCP treated apples stored in regular air (RA) were statistically equivalent to untreated CA, the current industry standard for storing apples. AgroFresh Inc. is actively testing use concepts for 1-MCP in pears, avocado, tomato, melons, papaya, and mango with emphasis on improving quality and market life. Active research programs are underway to develop product concepts in banana, persimmon, stone fruit, kiwifruit, green vegetables and exotic tropical fruits. 1-MCP in combination with MA packaging has shown promise for extending the market life and quality of vine and tree ripe fruits and green vegetables. Also, when applications are made to the whole fruit, 1-MCP holds promise for extending the market life of fresh-cut melons and tropical fruit.