

Abstract:

1-MCP is an inhibitor of ethylene perception that can affect ripening and/or senescence processes in fruit, vegetables and ornamental products. Responses to 1-MCP vary widely, including within a product type, perhaps because of cultivar and/or storage regime differences. In general, however, 1-MCP delays ripening and senescence and reduces ethylene production, respiration, color change and softening. Information about these effects is increasing rapidly and is available on a regularly updated web site (<http://www.hort.cornell.edu/mcp/>). 1-MCP is registered for use on a number of horticultural products in several countries, although commercial information remains limited except for apple fruit and ornamental products. The commercial potential for 1-MCP will be affected by many factors including the product response (especially in relation to quality as perceived by the consumer), how successfully 1-MCP use can be incorporated into handling, storage and transport systems, the scale of the industry involved, competition in the marketplace, and whether it provides access to markets that are otherwise unavailable using current technologies.