Abstract:

Nitric oxide is a highly reactive free radical gas which in recent years was found to be endogenously produced by plants. A short exposure to low concentrations of nitric oxide in an inert atmosphere was found to extend the postharvest life of a wide range of fruits, vegetables and cut flowers. However, at the effective concentration range in the low μL/L, nitric oxide was much less reactive with oxygen that expected and allows the use of nitric oxide as a fumigation in air. The commercial potential of nitric oxide is further enhanced by the effective use of solid nitric oxide releasing compounds which are water soluble. The mode of action of nitric oxide is considered to extend beyond being an inhibitor of ethylene action.