

رتبه سوم خارجی

Foreign Third Winner

Project Title:

Environmental Safety Methods for
Extending Post Harvest Life of
Ornamentals

Researcher:

Largrethe Serek (Ph.D.)

Country:

Denmark

University:

Royal Vet. & Agri. University



عنوان طرح:

نحوه افزایش عمر گل‌های تزئینی بدون تخریب محیط
زیست

محقق:

دکتر مارگریت سerek

کشور:

دانمارک

دانشگاه:

سلطنتی کشاورزی و دامپزشکی

Abstract:

The aim of the research is to find an environmentally safe substitute for the presently used silver containing chemical for prolonging the vase and shelf life of potted plants and cut flowers. It was discovered that 1-MCP (1-methylcyclopropene), a non-toxic gaseous compound, which similarly to STS eliminates the effects of the plant hormone ethylene, resulting in extending the postharvest life of ornamental crops. Since 1-MCP is non-harmful for humans, it is possible to use the material also for fruit and vegetables. 1-MCP has been registered for use for ornamental plants and is commercially available in the USA under the name EthylBlock.

Registration for fruit and vegetables is in progress. The group is continuously working on new possible materials which inhibit ethylene deleterious effects. Presently it has a range of cyclic olefins which appear to control ethylene effects on the receptor level, however the work needs further investigations.