



Looking for the best cutflowers for organic greenhouse culture

Casper Slootweg and Caroline Labrie

e-mail: casper.slootweg@wur.nl



Background

This project started in 2006 to find out which species and varieties can be used for organic culture in the greenhouse. The species and varieties were selected together with breeders, advisers, propagators, researchers and traders. The selection was based on the expected possibilities for good production and sales perspectives in bouquets.

Method

A protocol for growing each variety was made, based on the experience of growers and literature.

In 2006 and 2007, experiments were done with *Tagetes erecta*, *Calendula*, *Ornithogalum thyrsoides*, *Ammi visnaga*, *Helianthus*, *Astilbe* en *Alstroemeria*. All experiments were done at organic farms.

Results

The conclusions are summarized in the table. Most of the tested varieties could be grown on organic farms, with good results. However, growing flowers outside their normal growing season, or with special methods (like short day treatment) on organic farms will lead to the same problems as on common farms. This was the case with *Calendula* and *Helianthus*.

As a result of this survey, several farm- and product-specific challenges can be named:

- The success of certain varieties depends on the soil type.
- The need for pretreatment to obtain a good vase life.
- Market potentials of small amounts of flowers.
- Pests, for which there are no predators.
- A larger assortment can lead to higher costs per flower.
- Fertilization of crops with a long growing period.

Crop	Year	Number of tested varieties	Result	Best varieties	Challenge
<i>Calendula</i>	2006	12	negative	Indian prince Kabloena Orange Ball's Supreme Orange porcupine	Vase life when harvest in warm period
<i>Ornithogalum</i>	2006	2	positive	No differences	Marketing the high production
<i>Ammi visnaga</i>	2006	2	negative	No differences	Abnormal shoots Rotting of growing point
<i>Tagetes erecta</i>	2006 2007	10	positive	Nosento Limegreen	Leaf spots Pests
<i>Astilbe</i>	2007	7	positive	Washington Europa Diamant	Marketing Rhizoctonia Length of <i>A. japonica</i> High cost young plants
<i>Helianthus</i> SD plants	2007	2	partly positive	SD tested on Sunrich Orange	Leaves above flowers Marketing 'High Tech'
<i>Alstroemeria</i>	2007	7	positive	Depends on market	<i>Cicadidae</i> Fertilization

