

Seminar
Innovative planting material from the EU:

'For professionals, from professionals'

On the occasion of Hortitec
June 23, 2006
Holambra SP, Brazil



CAMPAIGN FINANCED WITH SUPPORT
OF THE EUROPEAN UNION AND THE FLOWER
COUNCIL OF HOLLAND

nak, tuinbouw



EU Seeds and Plants: High quality standards & systems control

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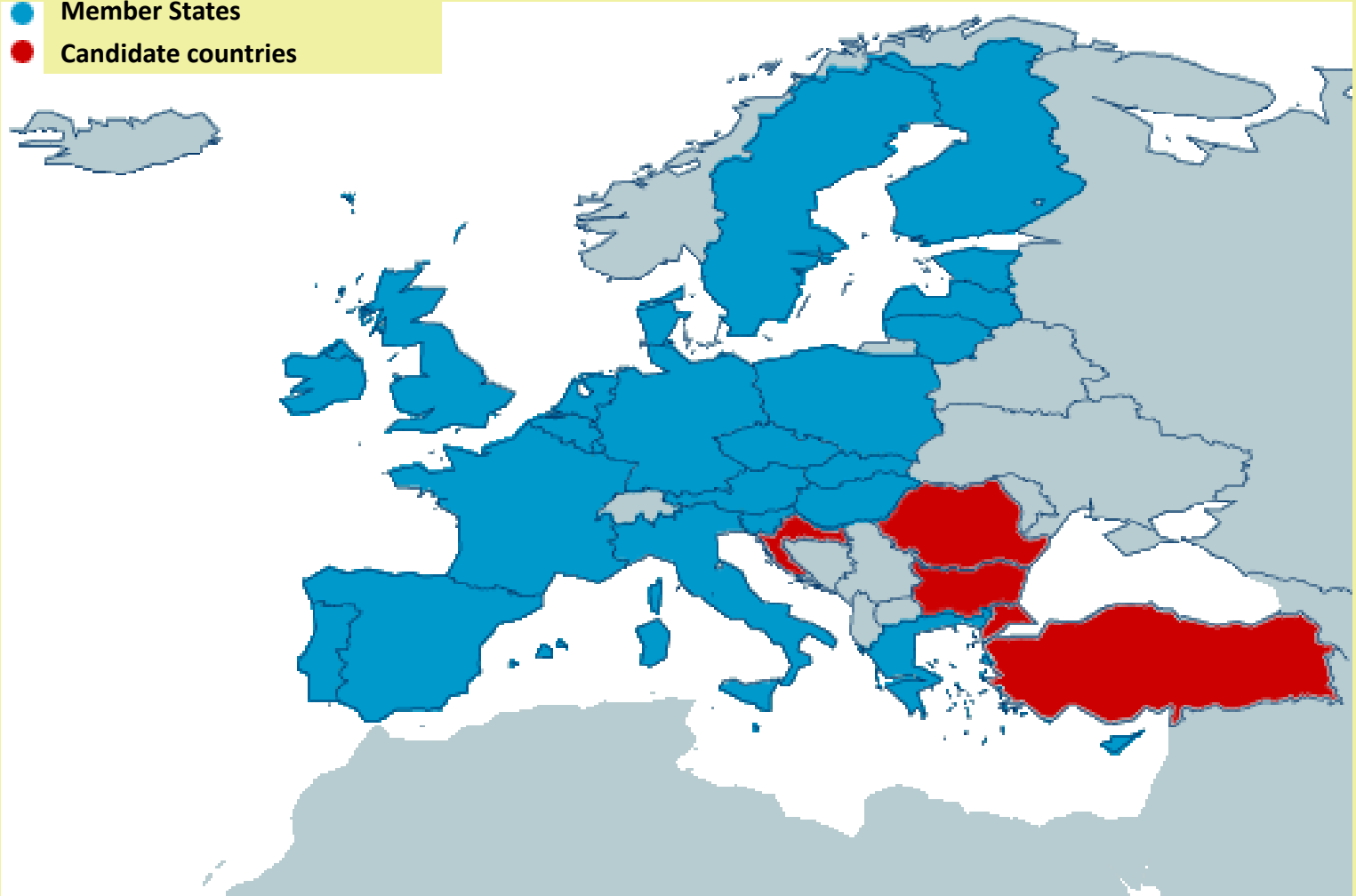
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European Union (1)

● Member States

● Candidate countries



European Union (2)

- Well known for its breeding and propagating companies in floriculture
- Sound quality requirements in 25 member states on basis of EU directive 98/56
- Accredited companies and official inspections
- Internal EU plant passport system
- Extra quality programs for seeds/plants
- Extra: testing and certification

Worldwide leading propagators in EU

- Main countries: Netherlands, Germany, UK, Denmark, Italy, France
- Fides, Florensis, PAC Elsner, Ball, Anthura, Innovaplant, Yoder, Floranova, Fischer, Benary, Daenfeld, SBW International, Syngenta, Royal van Zanten, Lazeri, Barbaret et Blanc, Danelite
- Production of seeds and cuttings in worldwide locations (East Africa, Brasil, Mexico, Israel)

Authorities

- Plant protection services of the member states
- Specific quality inspection agencies f.e.
 - Naktuinbouw, Netherlands
 - SOC, France
 - OMMI, Hungary

Example: Naktuinbouw (1)

- Netherlands Inspection Service for Horticulture
- More than 60 years experience in:
 - Inspections
 - Laboratories
 - Variety identification / registration
- Fully authorized by Dutch Ministry of Agriculture
- 200 employees / 40 inspectors
- www.naktuinbouw.com

Example: Naktuinbouw (2)

- 4000 registered producers horticultural seeds/plants in the Netherlands
- Phytosanitary inspections under supervision and auditing/monitoring Plant Protection Service
- ISO 9001 : 2000 certified
- ISTA accredited
- Active in international organisations ISHI/EPPO

Regulations floricultural propagating material (EU)

- Obligatory EU basic inspection
 - quality (identity, health) (1998/56)
 - quarantine (plant passports) (2000/29)
- All companies/material regularly inspected according to these standards
- Implemented in 25 member states
- Information legislation on: www.europe.eu.int

Basic inspection program (1)

- Operated by official authorities in member states
- Registration of all companies/facilities that produce propagating material (legal obligation)
- Annual evaluation management and quality program of company (keeping quality records f.e. on diseases)

Basic inspection program (2)

- Supervision of production process
- Regular visual inspection on identity, health and quality of mother plants, cuttings, seedlings
- If (on suspicion) necessary: testing and pathogen diagnosis in Laboratory
- Material marketed with EU quality suppliers document and plant passport or international phytosanitary certificate

Basic inspection program (3)



Extra programs (1)



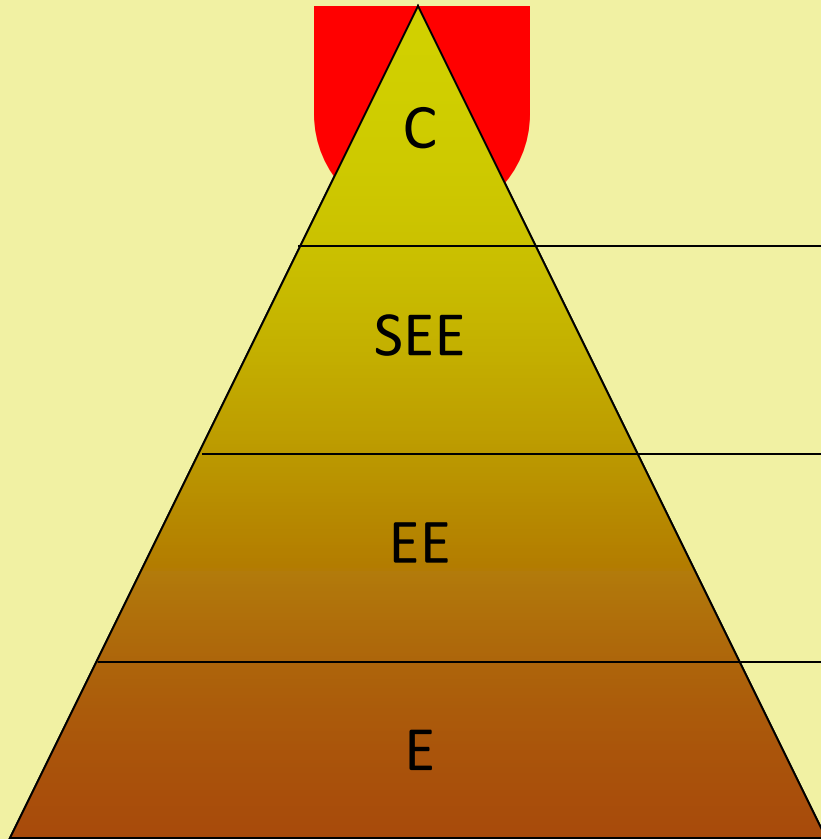
Extra programs (2)

- Naktuinbouw Elite[®] since 1960's
(carnation, chrysanthemum, pelargonium)
- Denmark Elite since 1980's
- In 1970's: Elisa test technique for viruses introduced: gave boost in programs
- Requirement “pathogen free” according to EPPO and other international recommendations (www.eppo.org)
- Also individual company programs exist.

Naktuinbouw Elite®

- Introduced in year 2000
- Participants in many countries
- Leading propagators participate
- Operated world wide in propagating material (Europe, Africa, Latin America)
- Nowadays: more than 200 species (cut flowers, bedding plants, annuals, perennials, pot plants) included
- Attention focused on prevention/hygiene

EU/EPPO model certification



- Candidate plant
- Nuclear stock (Pre-basic)
- Propagation stock (Basic)
- Certified stock (Certified)

Requirements for participants (1)

- Quality Management System (QMS)
 - production
 - hygiene
 - sampling
 - testing
- Equivalency QMS to ISO 9001

Requirements for participants (2)

- Adequate facilities
 - aphid proof greenhouses
 - entrance sluice
 - not grown in soil but in pathogen free substrates
 - clean water
- Skilled personnel
- Audited annually

Requirements for participants (3)



Example: Petunia in Naktuinbouw Elite[®]

- Visually all stages completely free of symptoms
- Testing candidates on: TBRV, TNV, BBWV, TBSV, SgCV, PepMV, TSWV/INSV, ArMV, TAV, PVX, ToRSV, TRSV, PSTVd, ALV
- Testing all stages on: AMV, Potyvirus, TMV/ToMV, CMV

Summary

- EU: formal inspection system operated on quality and quarantine
- All companies registered and regularly inspected
- Material marketed with suppliers certificate, plant passport and/or international phyto certificate
- Naktuinbouw Elite® Certificates for cuttings/plants give extra guarantee of health and quality



Quality in Horticulture