



# Sea buckthorn cultivation in Finland now and the future progress

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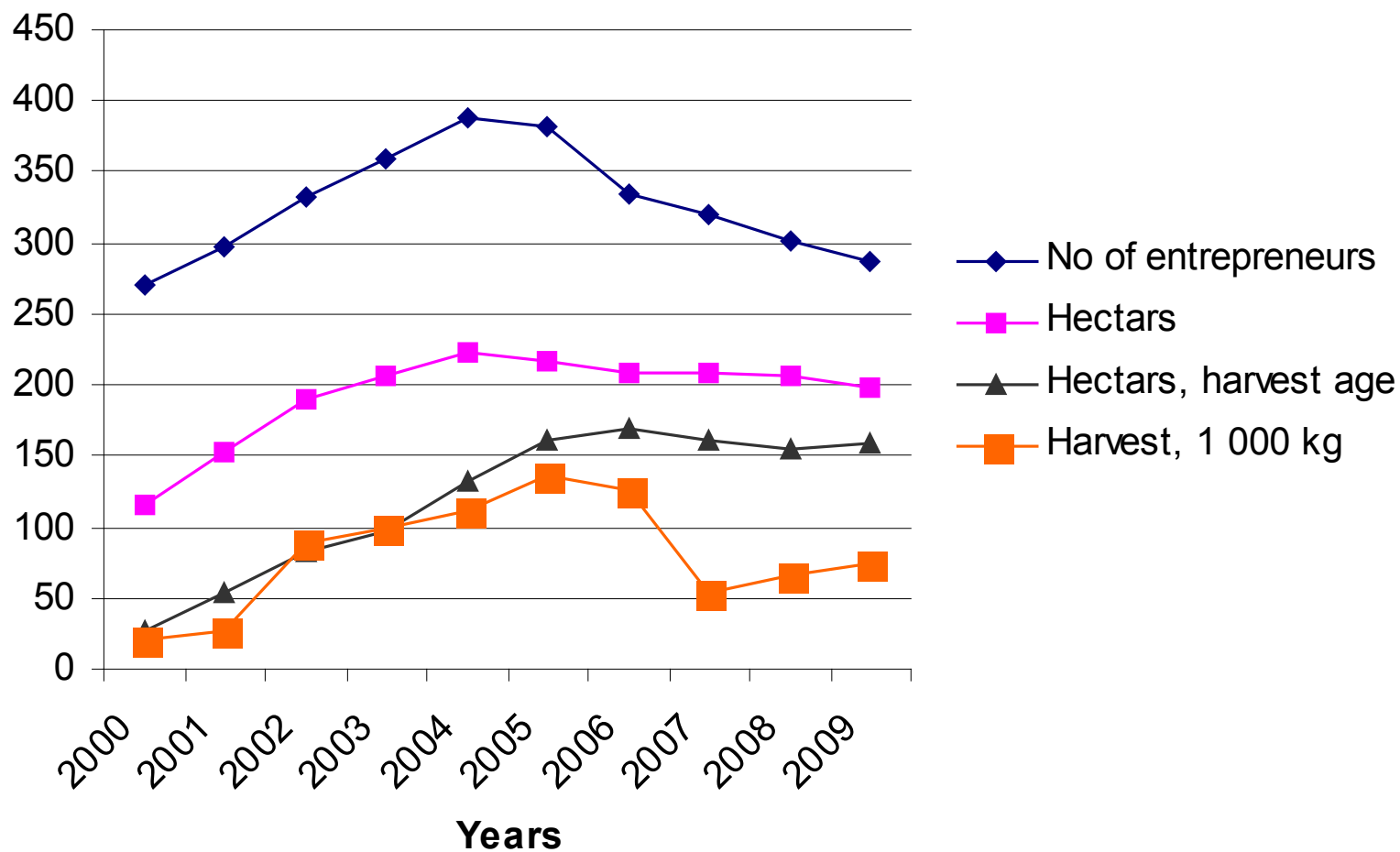


The European Agricultural Fund  
for Rural Development:  
Europe investing in rural areas

# Cultivation facts

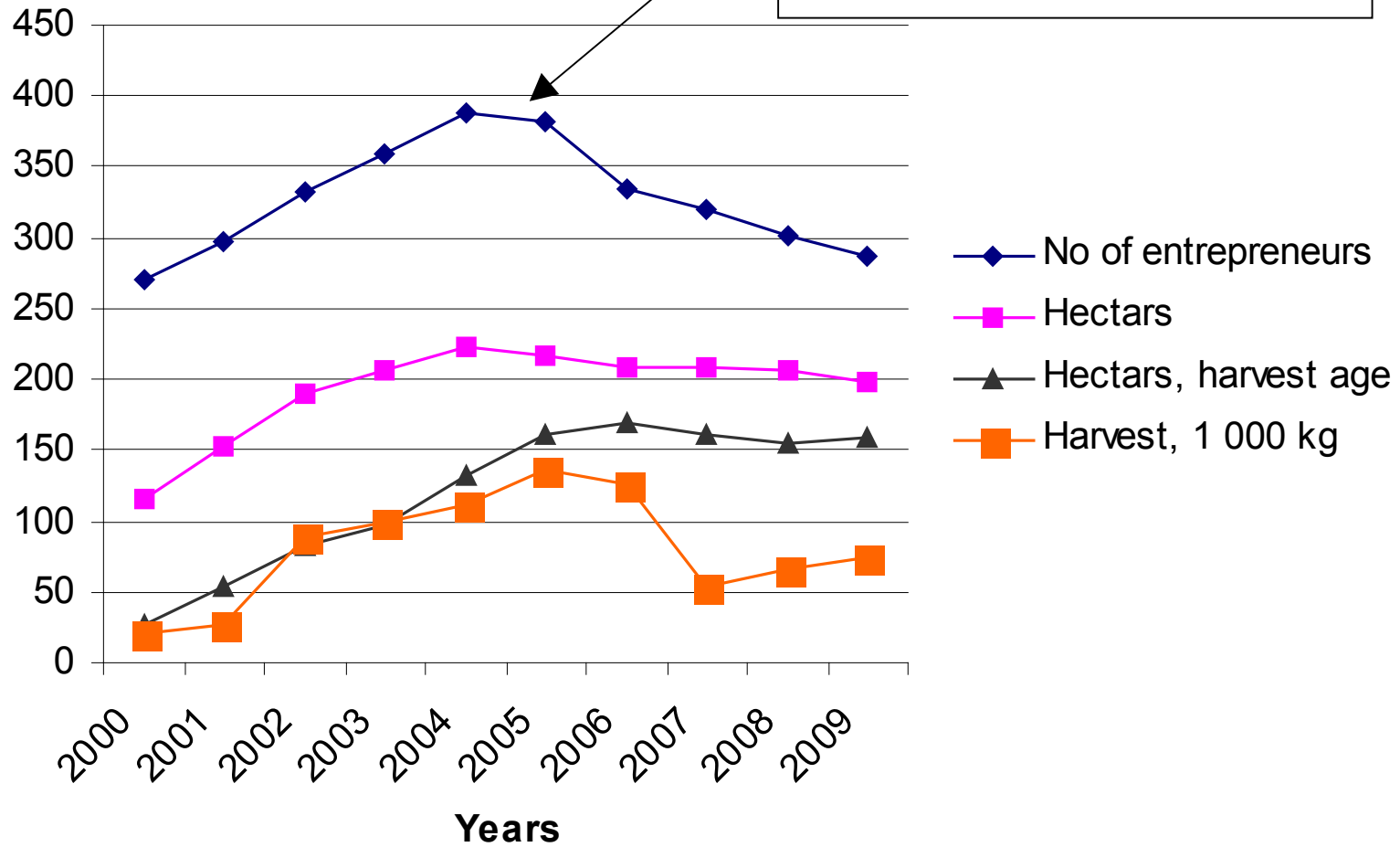
- Cultivation area 198 hectares
  - Average plantation size 0,7 hectares
  - In year 2010 harvest 74 tons, average harvest 465 kg/ha
  - The best average crop in year 2002: 1072 kg/ha
  - Harvest by hand picking and suckers, in recent years also by hand cutting
  - Varieties: Russian varieties from Moscow State University, seedlings from crossings of Moscow varieties and natural strains, seedlings from natural strains, Finnish varieties Raisa, Terhi, and Tytti and males Rudolf and Tarmo.
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# Cultivation facts

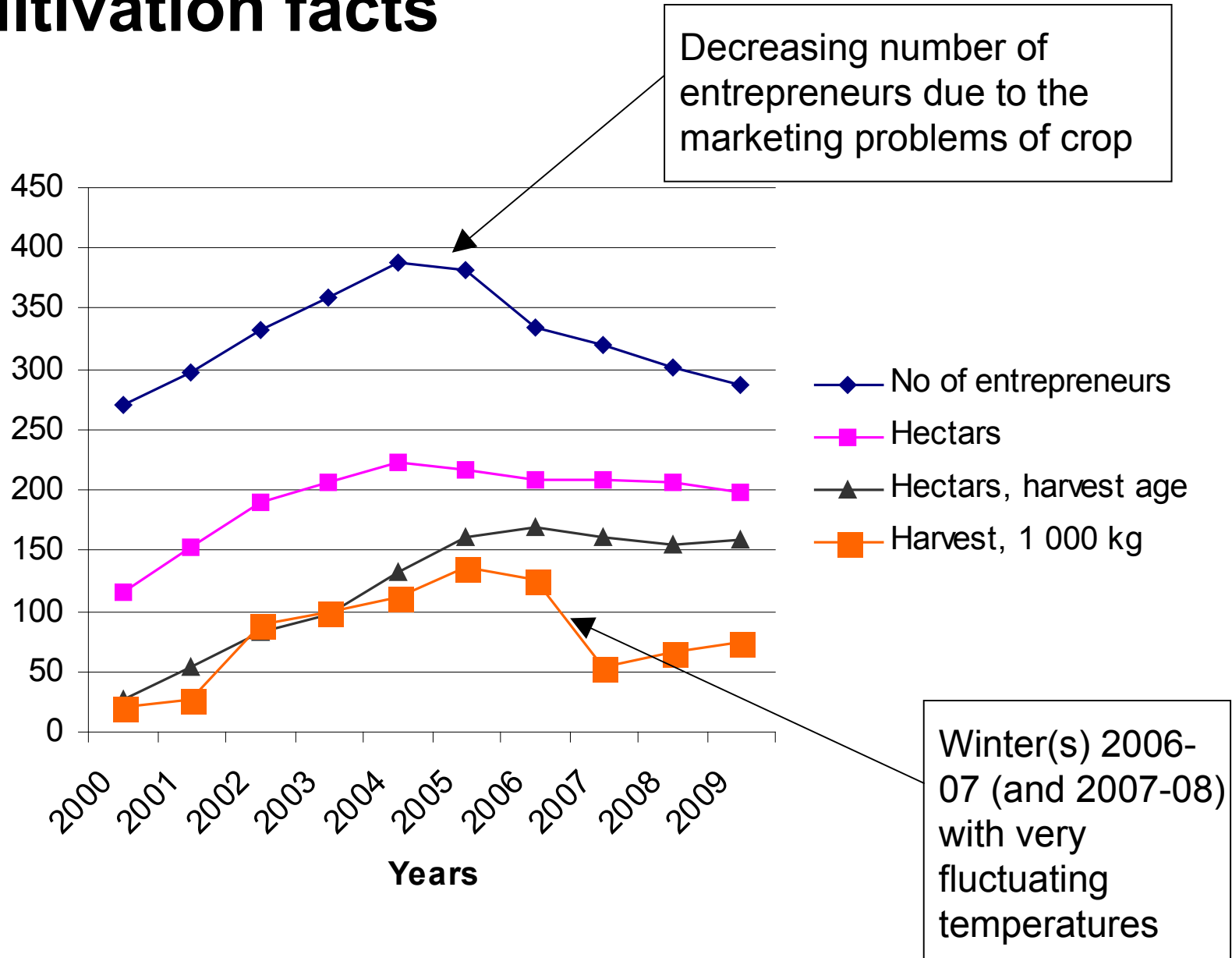


# Cultivation facts

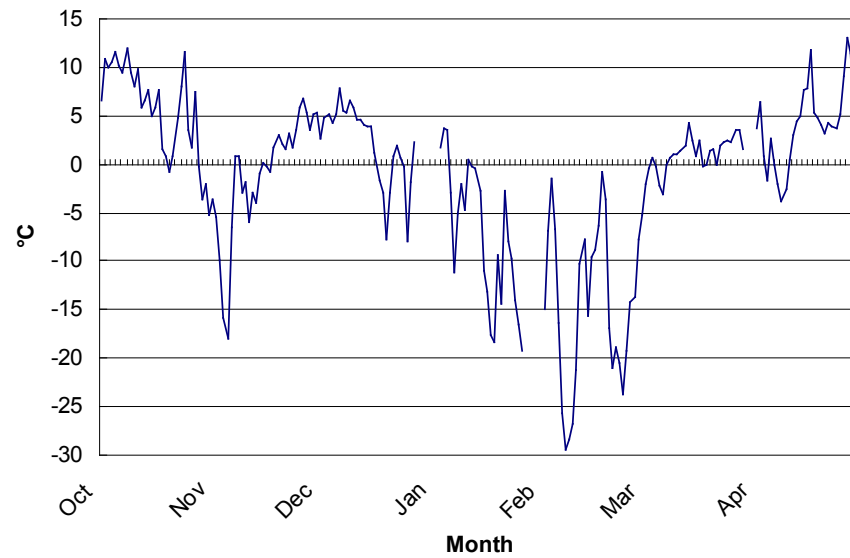
Decreasing number of entrepreneurs due to the marketing problems of crop



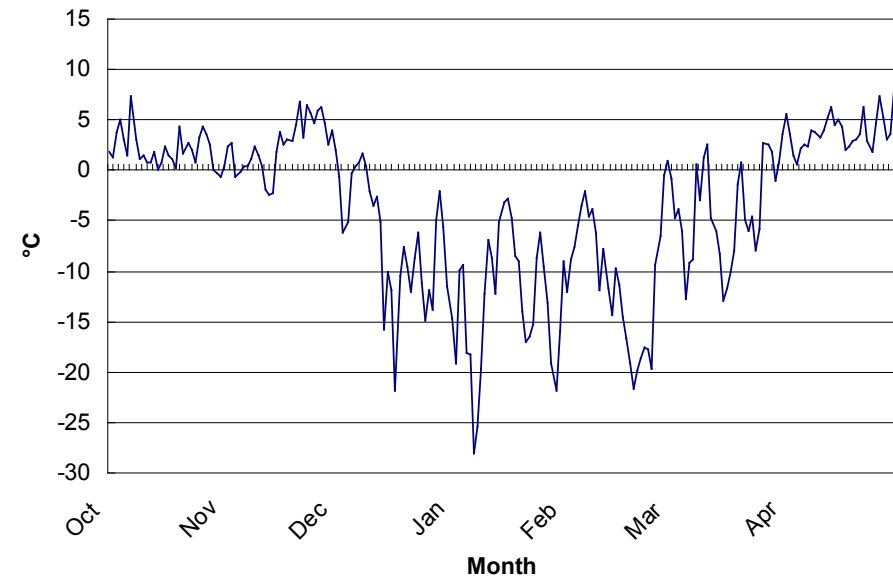
# Cultivation facts



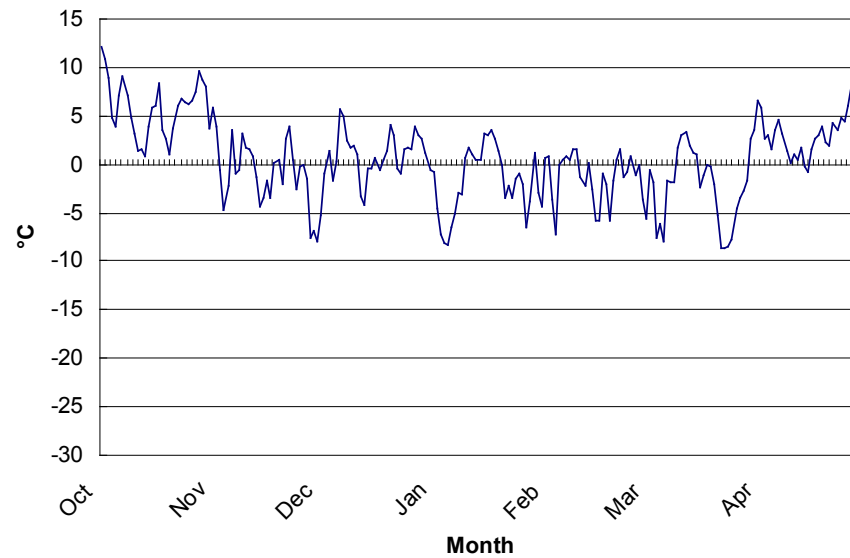
Winter 2006-2007



Winter 2009-2010



Winter 2007-2008



## Progress already in process

- Motivated entrepreneurs in Western Finland
  - Harvesting machines for cutting method already exists
  - Good products exists
  - Processing lines for fractioning of the berry exists
  - Buyers for the products exist
  - Bigger plantations coming soon
  - **BUT we are still lacking of winterhardy, disease resistant and productive varieties for Finnish climate**  
(or the testing of existing Finnish varieties/strains for harvesting by cutting method is not done yet)
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# Variety selection

- A goal is to find new varieties for Finnish climate based totally on our natural populations
    - Selection of 20-30 female strains and 5-10 male strains from already well-proved individuals from the west coast or farmers are going to be planted to test fields in three places
    - Fruit size, yield, winter hardiness, disease resistance, cutting behavior, quality of berry, seed and leaf
  - Already about 20 individuals selected and propagation by cuttings started, test places selected, during the summer 2011 test fields will be prepared and more plants propagated, also more good seedlings will be selected
    - Test fields ready in the summer 2012
    - Earliest results of the yield potential and other characteristics in 2018
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## Symptoms of stem canker

- studied in Finland to be caused by fungus *Stigmina* sp.



**Symptoms of stem canker**

Natural strains propagated by seed growing in the field in Western Finland



"Irja", a cross  
between Russian  
variety and wild  
selection



"Irja", berry size  
about 0,8 g



Natural strain in the  
western archipelago



Natural strain in the  
western archipelago



## Natural habitats of wild sea buckthorn in the west coast of Finland





Berry sizes of some of the individuals selected for field tests

0,9 g  
*marja*

0,6 g  
*marja*

1,2 g  
*marja*





**Thank you for your attention!**