

# Sweet pepper cultivation in the Netherlands

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# Subjects sweet pepper cultivation

- General information
- Cultivation of sweet pepper
- Pests and diseases
- Harvest and handling
- Economy





A close-up photograph of numerous bell peppers in three colors: red, yellow, and green. They are packed closely together on a reflective, metallic surface. The peppers are in various stages of ripeness, with some showing a mix of colors. The text "General information" is overlaid in the center in a white, sans-serif font.

# General information

# Sorts of sweet pepper cultivated in the Netherlands

## ■ Main sorts

- Red



- Yellow



- Green



- Orange



## ■ Other sorts

- Sweet conical peppers



- Mini peppers



# Differences in length of the peduncle between varieties and during the season:

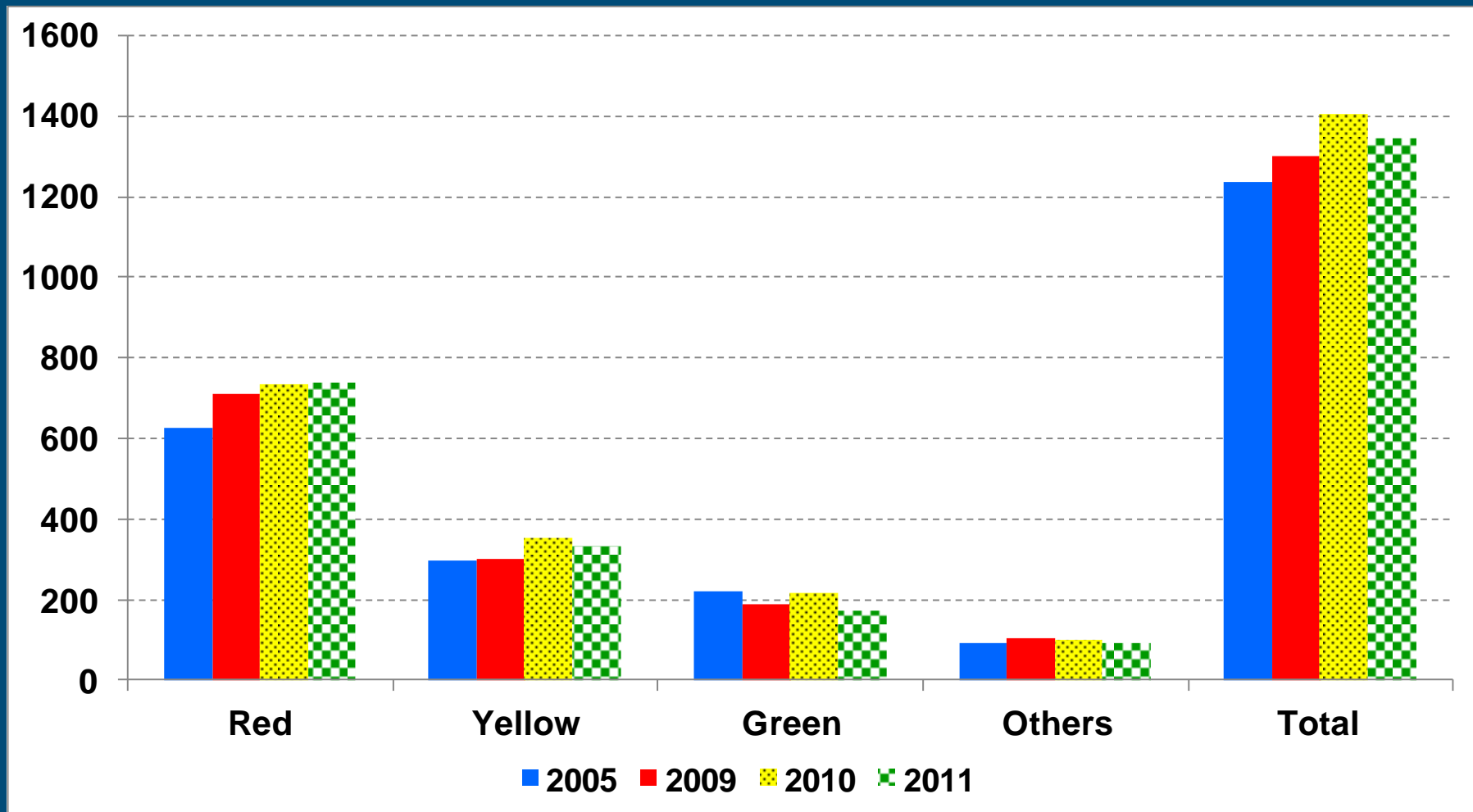
⇒ in spring longer

⇒ summer and autumn smaller

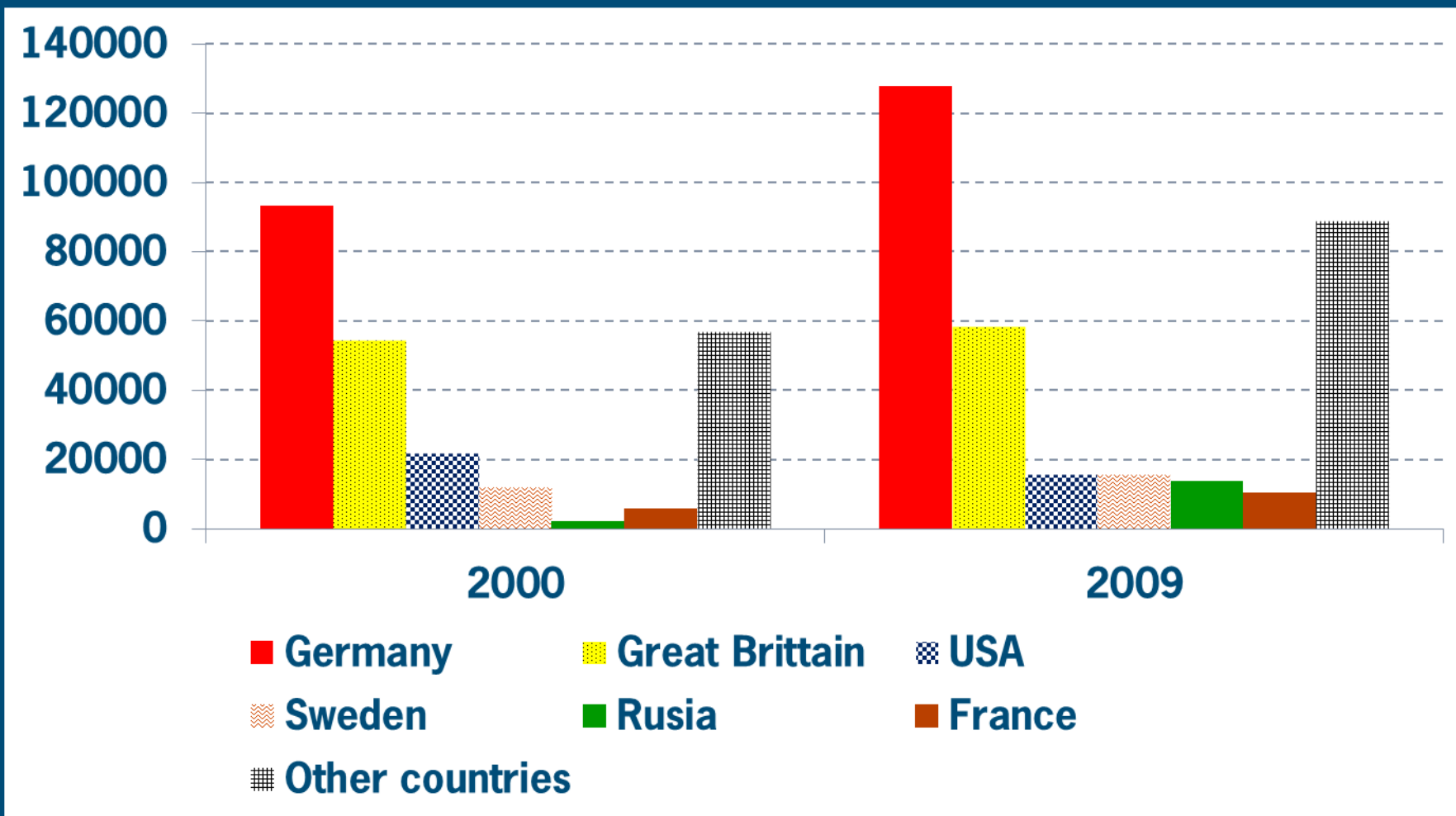




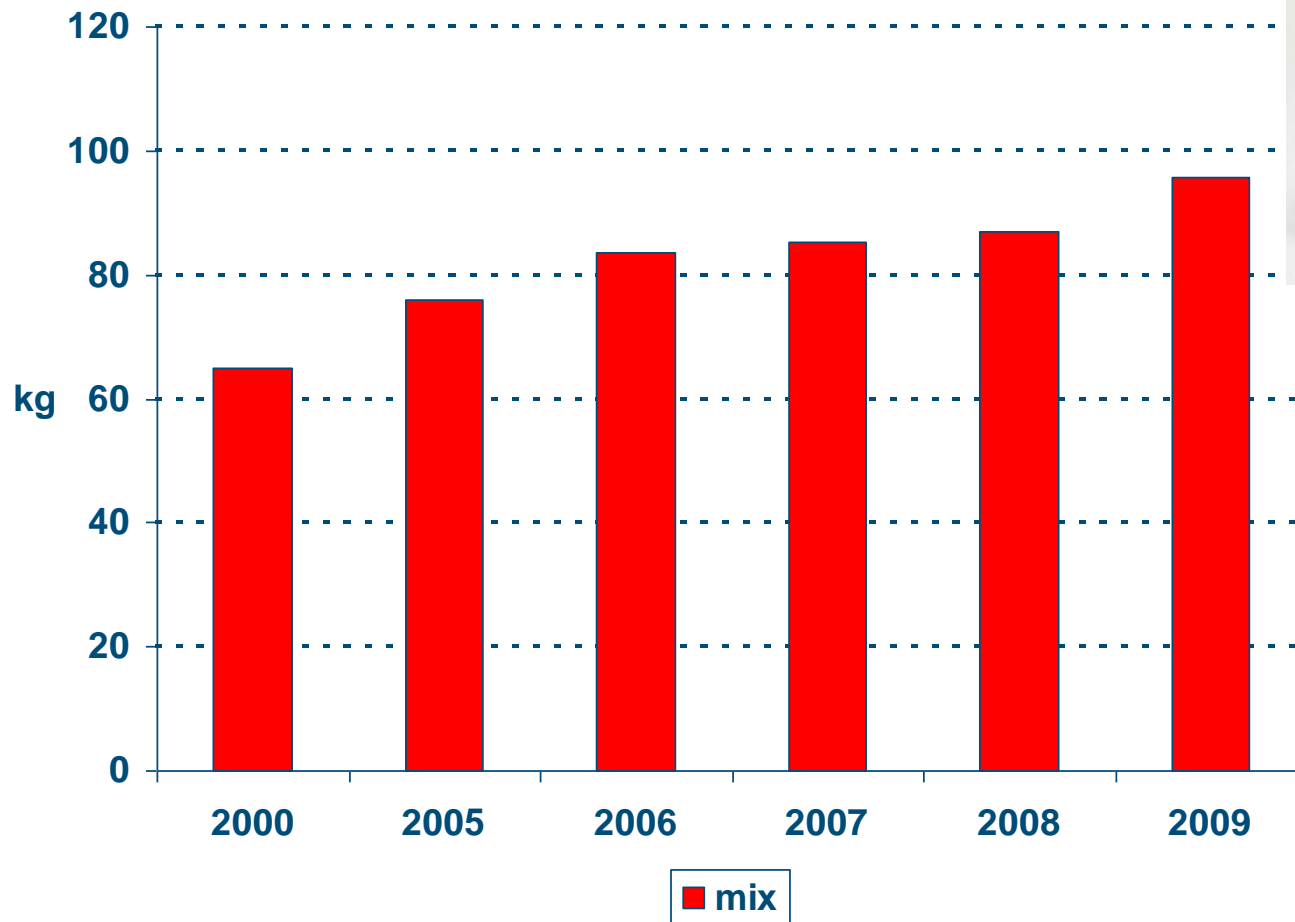
# Surface (ha) sweet pepper under glass



# Export Dutch sweet pepper (x 1000 kg)



# Export sweet pepper mix (x 1000kg)



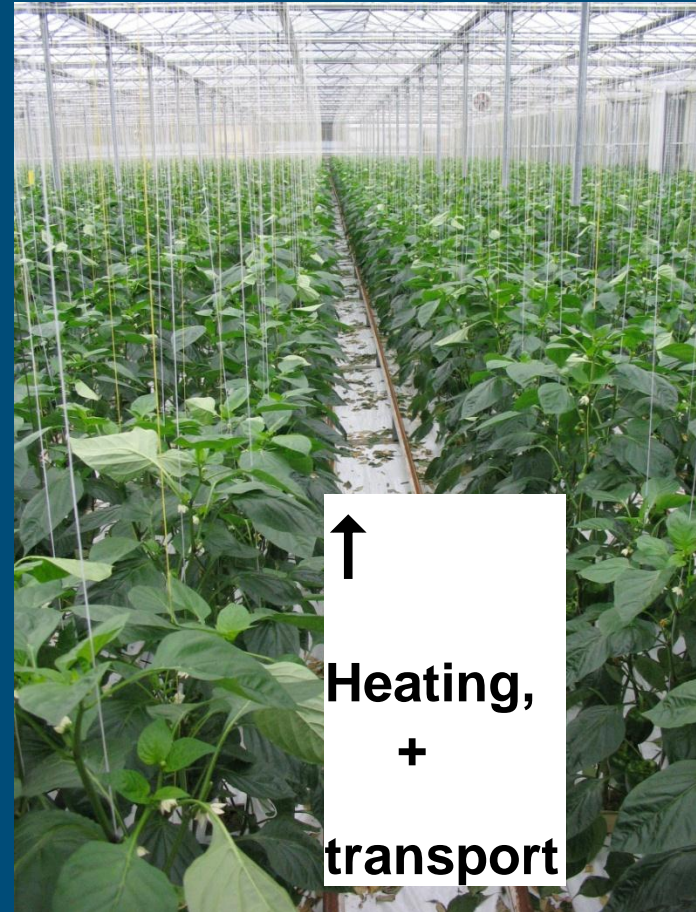


A close-up photograph of numerous bell peppers in three colors: red, yellow, and green. They are packed closely together on a reflective, metallic surface. The peppers are in various stages of ripeness and are oriented in different directions, creating a vibrant and textured composition. The word "Cultivation" is superimposed in white text in the center of the image.

# Cultivation

# The cultivation of sweet pepper

- Only in Venlo Glasshouses
- Always with heating
- Always dose of CO<sub>2</sub> during the day
- Advanced climate control
- Cultivation on substrate









# High wire system of tomato no option for sweet pepper





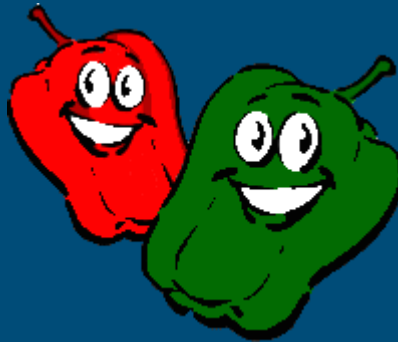
# Mobile system, trials in 2003-2005

- In gutter is conveyer
- The pots are going to the central path
- All labour on plants and harvest is done central
- Problem: **To expensive**



# The division of the assimilates (sugar) in sweet pepper

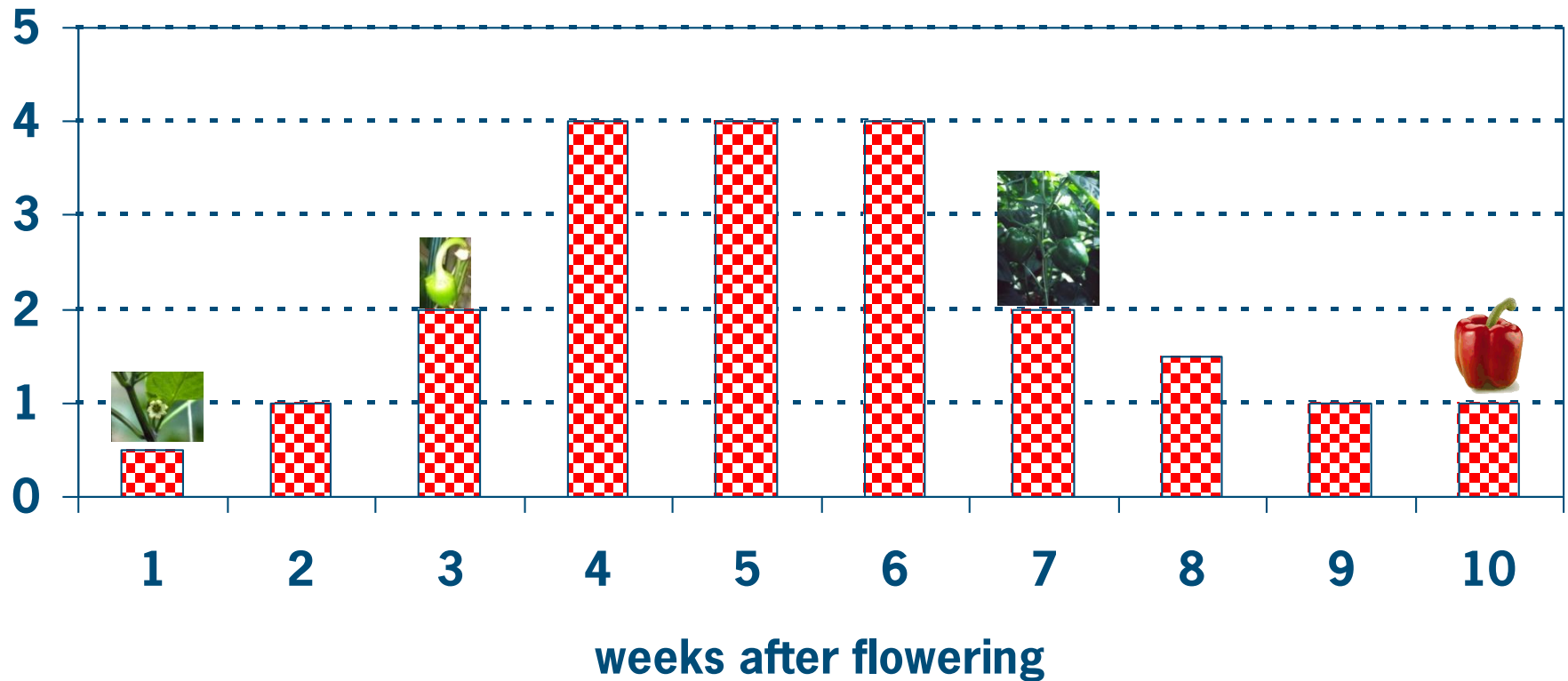
## ① The fruits



← 65%

- ② Stem and leaves
- ③ Roots
- ④ New buds (flowers)

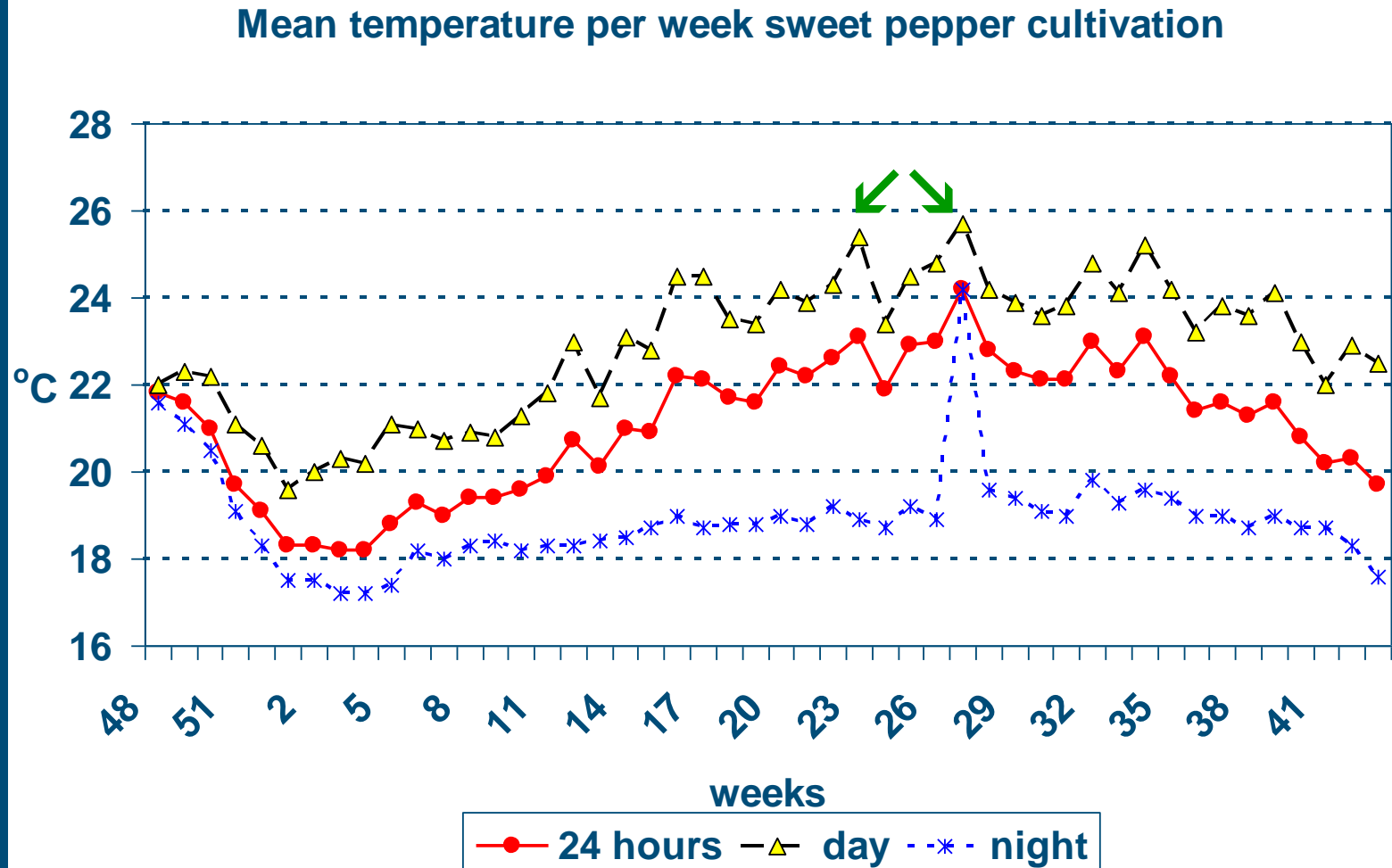
# Demand of assimilates (sugar) by the fruits



 demand of assimilates by the sweet pepper fruit

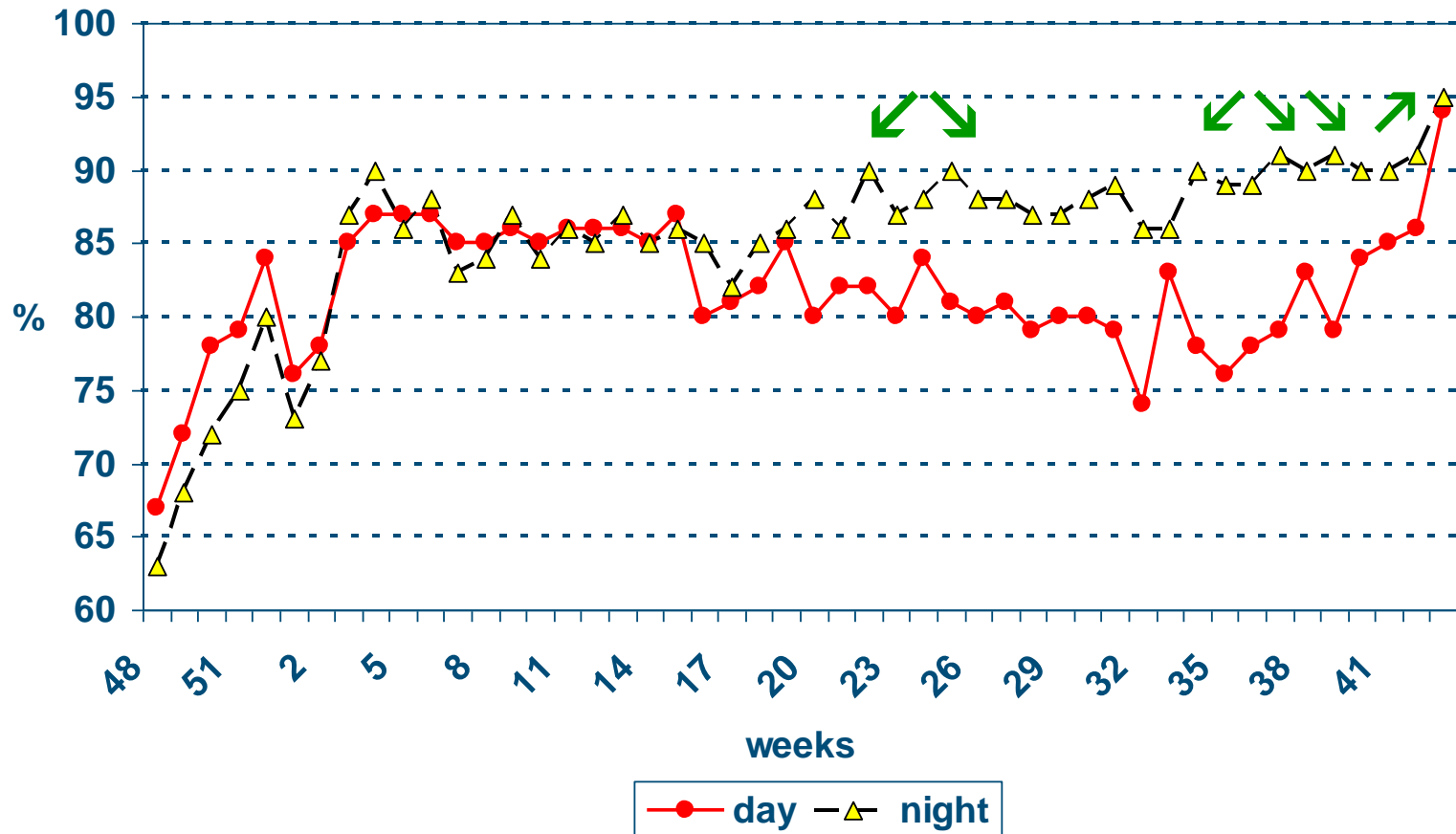


# Glasshouse climate (mean temperature/ week)



# Glasshouse climate(mean humidity/ week)

Mean relative humidity per week sweet pepper cultivation



# At the end of the cultivation







# Pests and diseases



# Integrated pest management by sweet pepper

- After planting (December/January) few times spraying (3-5) with chemicals to clean the glasshouse against insects.
- Introduction beneficial insects
- Only local chemical control against insects

In this presentation only one disease will be explained!

# Bacteriën: *Erwinia* - soft rot



- Brown, slimy, rotting spots
- Penetrating smell in infected fruit
- Easy spread by **infected knife**



■ Foto's Groen Agro Control



# Harvest and handling

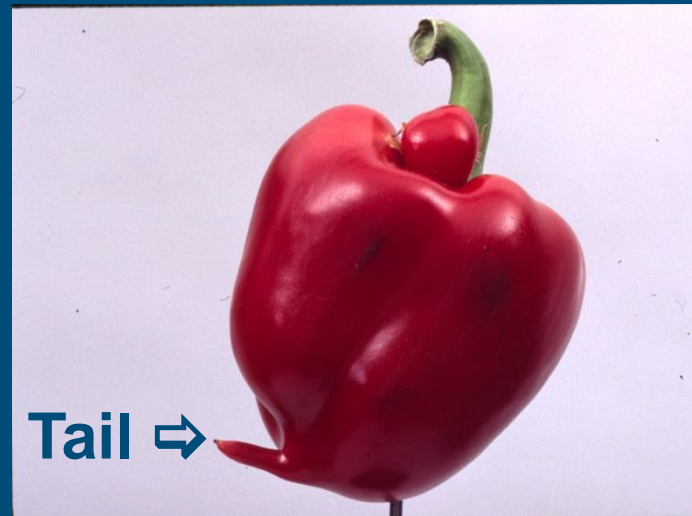


# Defects of the fruits





# More defects of fruits



# Damage at harvesting



# Harvesting and handling by a grower





# Advice

- By harvesting the product always take care that the product will be cut carefully
- Always put the product directly in boxes

# Sorting by a grower



# Result of sorting





# Sorting and packing at growers organisation



# Sorting (differences between growers organisations)

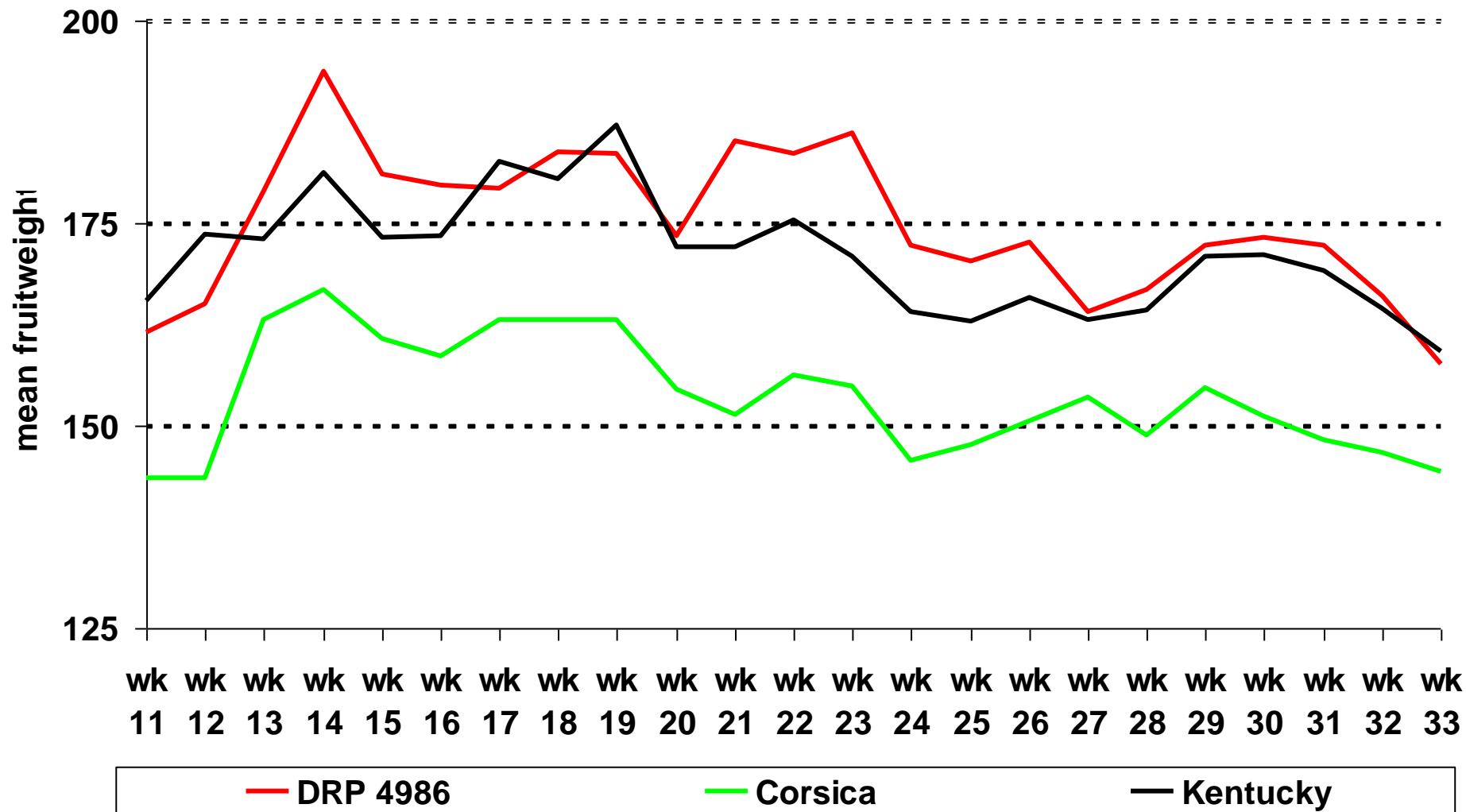
## Measure

- Mostly for boxes of 5 kg
- 65 – 75 mm
- 75 – 85 mm
- 85 – 95 mm
- > 95 mm

## Weight

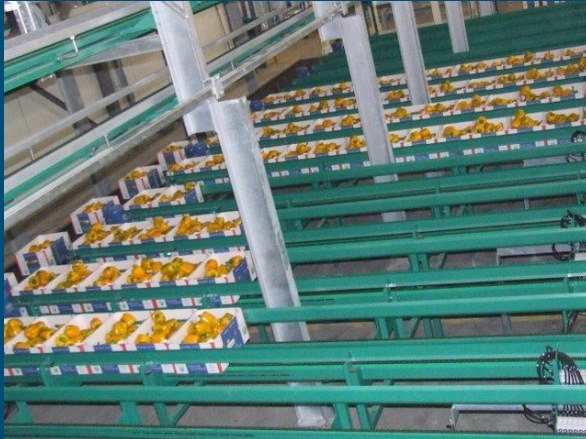
- Important by mix (500gr)
- Cheapest colour heaviest
- 120 – 140 gr
- 140 – 160 gr
- 160 – 180 gr
- 180 – 210 gr

# Example mean fruit weight different between varieties





# Sorting and packing



Solide box, with information about producer!



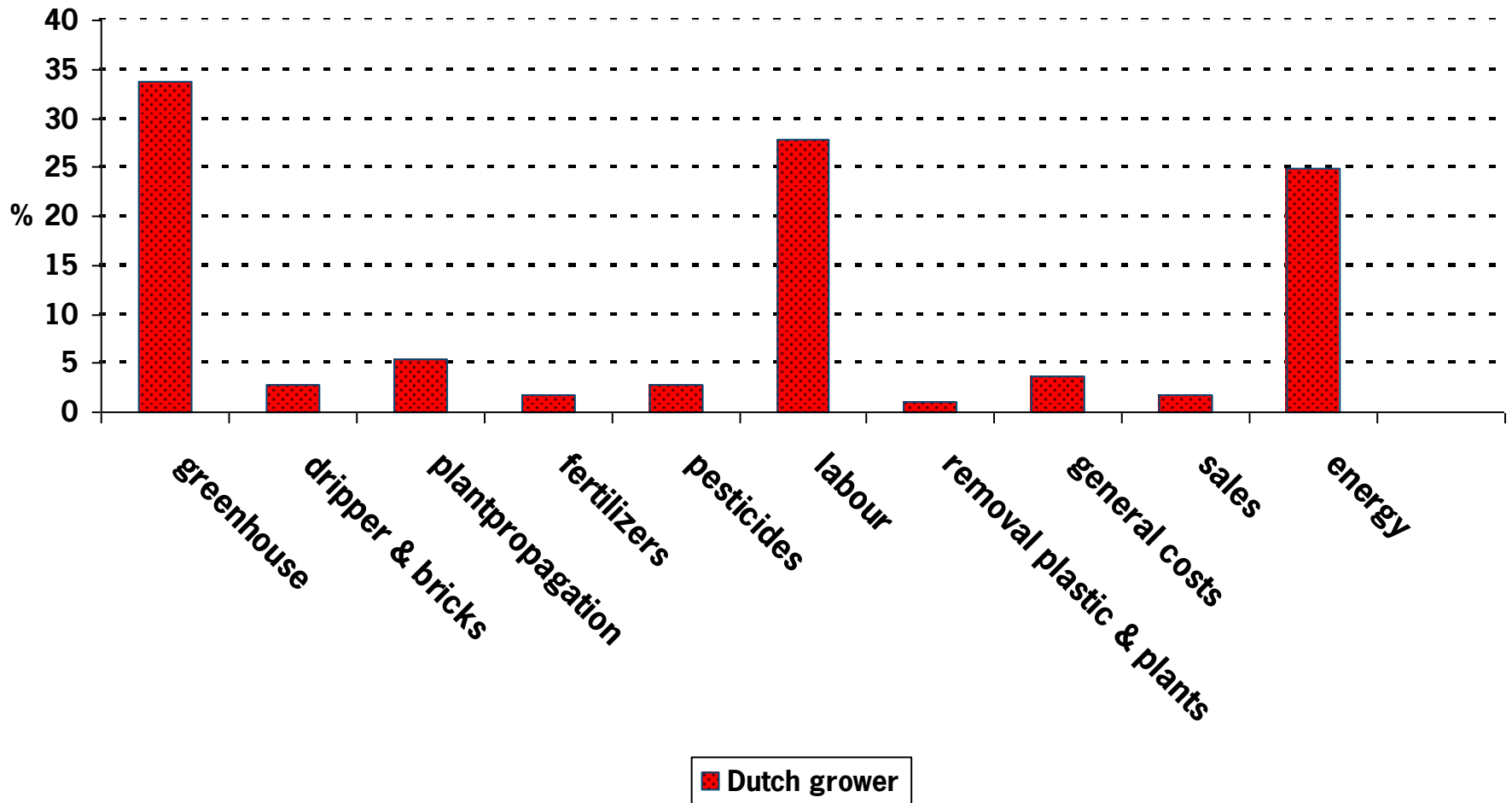
+/- 500 gram





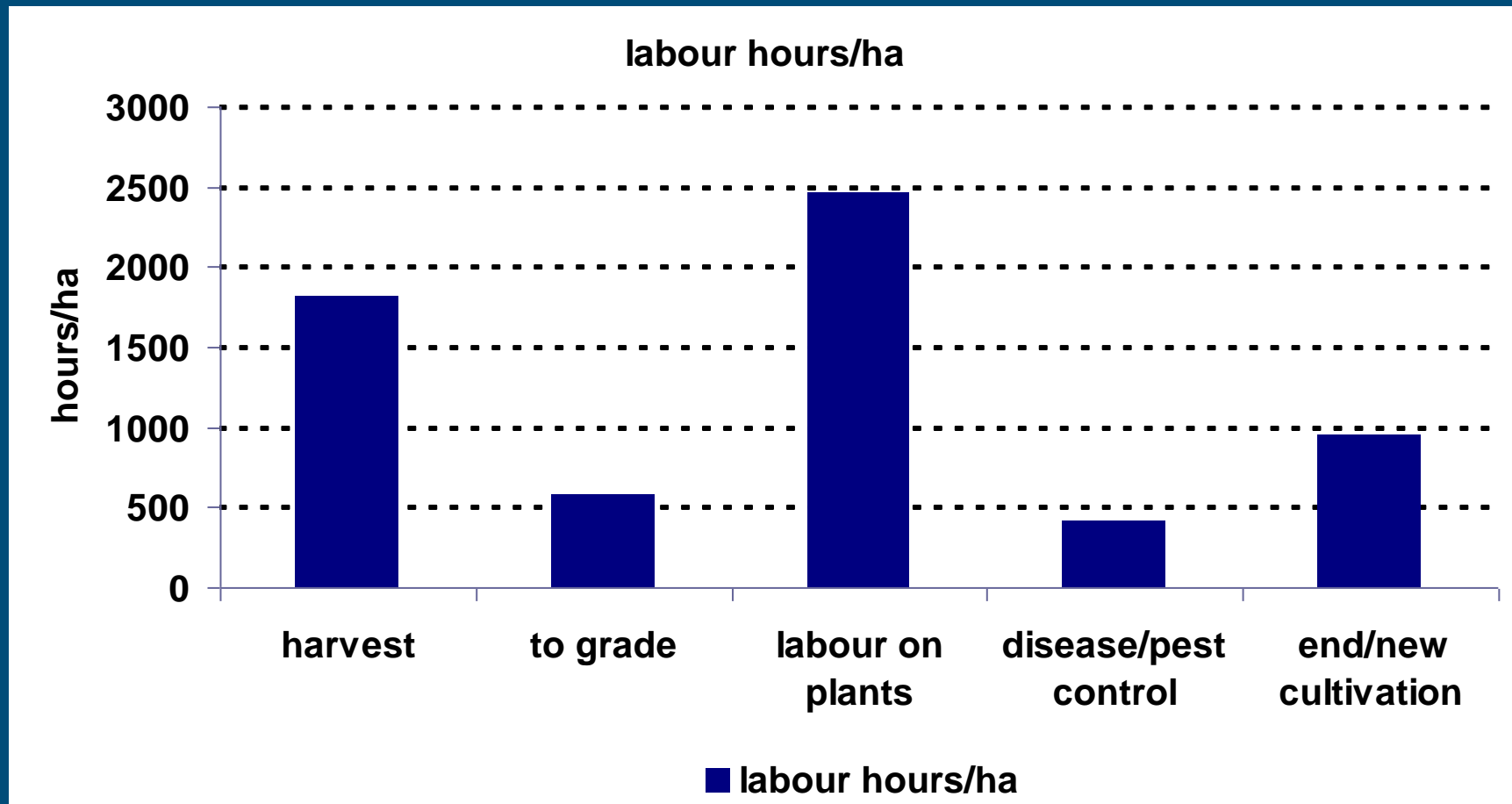
**Economy**

# Compare costs Dutch sweet pepper grower





# Labour sweetpepper cultivation



Source: KWIN

# Thank You very much

## Questions?

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