



Technical innovation of pears in Belgium

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Proeftuin pit- en steenfruit (pps)



Topics

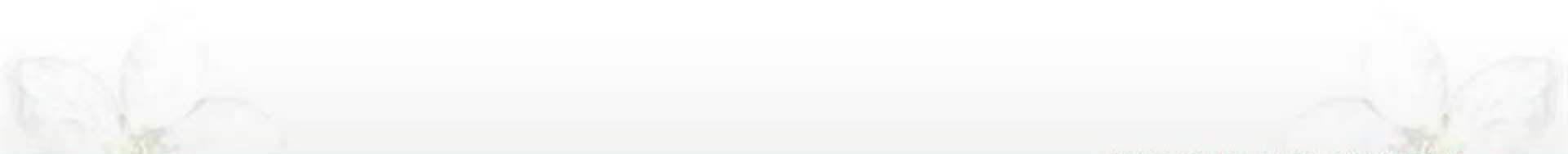


- New pear varieties
 - Demands for a new pear variety
 - Experiences with new pear varieties
- Rootstocks
- Planting systems



New pear varieties

(Research done with financial support of CMO)





New pear varieties in Belgium

- Corina®: 100 ha (plant stop)
- Sweet Sensation®: 135 ha
- Cepuna/Migo®: ± 20 ha
(expectation/hope = 140 ha by 2022)
- Celina/QTee®: 100 ha (+ 30 ha / stop)
- Dicolor: ± 20 ha



Demands for a new pear variety

Grower

- Productive, good size, good taste
- Vigour not too strong
- Possibility of parthenocarpy
- Fruit set through sprayings with GA
- Optimal for our climate
- Low susceptible to fire blight
- Good storability and shelf life
- Low susceptible to pests and diseases



Demands for a new pear variety

Consumer

- Good outlook
- Good taste
- Good storability and shelf life
- No residus

- Earlier available
- Green and smooth, less russeting
- Red blush



New pear varieties



Corina®



Celina/QTee®



Cepuna/Migo®



Sweet Sensation®



Dicolor



Corina[®] (Vroege Saels) in Belgium

- ± 100 ha (plant stop)
- Early Conference (**3 weeks earlier**)
- Club-variety
- Production 2015: 1.900 Tons
- Production 2016: 1.700 Tons
- Nursery R. Nicolai and “Gebroeders Saels”





Cepuna/Migo®



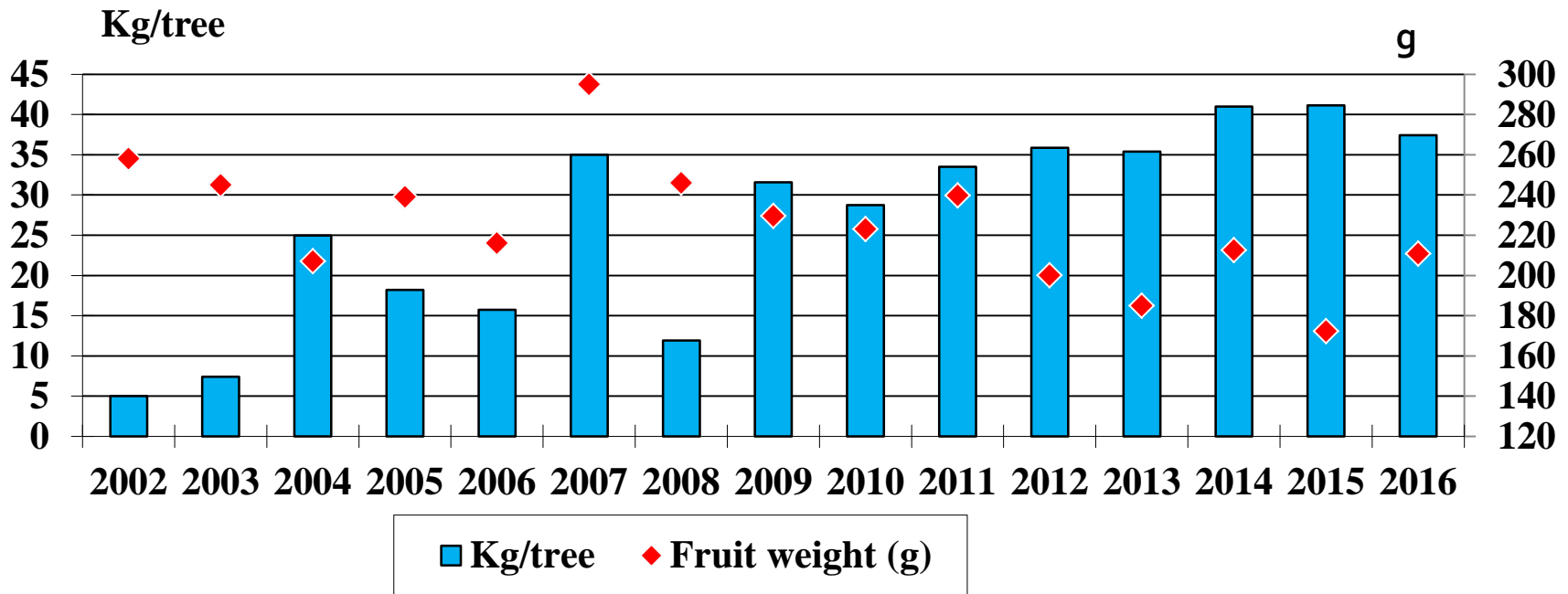
- Conference x Doyenné d'Hiver
- Angers (France)
- Harvest: immediately after Conference
- Productive, good fruit size
- Good storability and shelf-life
- Good taste, juicy
- Almost no russeting
- Problems with incompatibility on Quince C





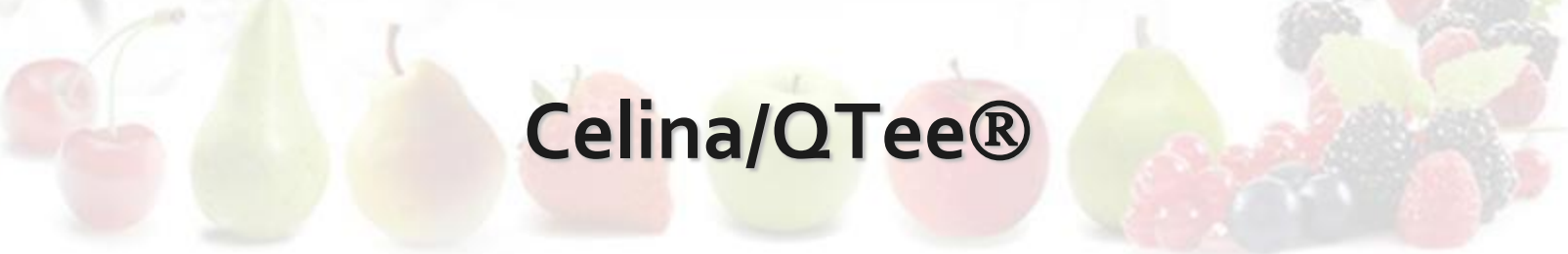
Cepuna/Migo®

Yield data 2007-2016



Planting year: 1999-2000

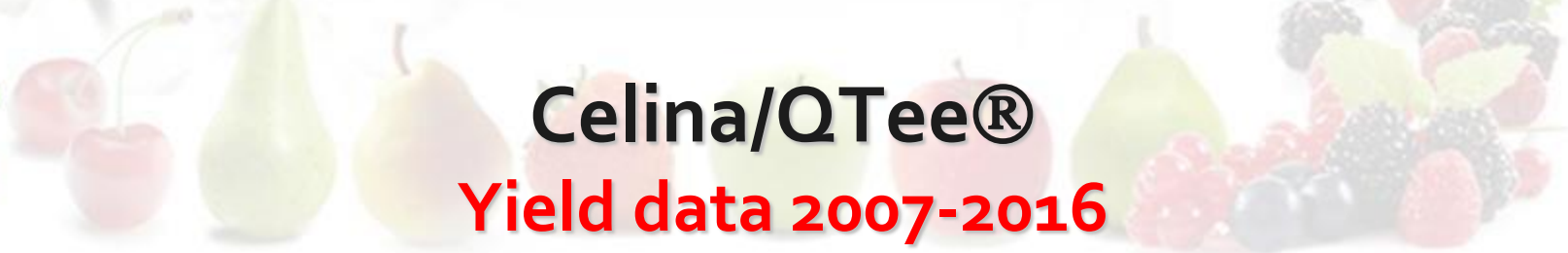
Rootstock: Quince Adams (B. Hardy)



Celina/QTee®

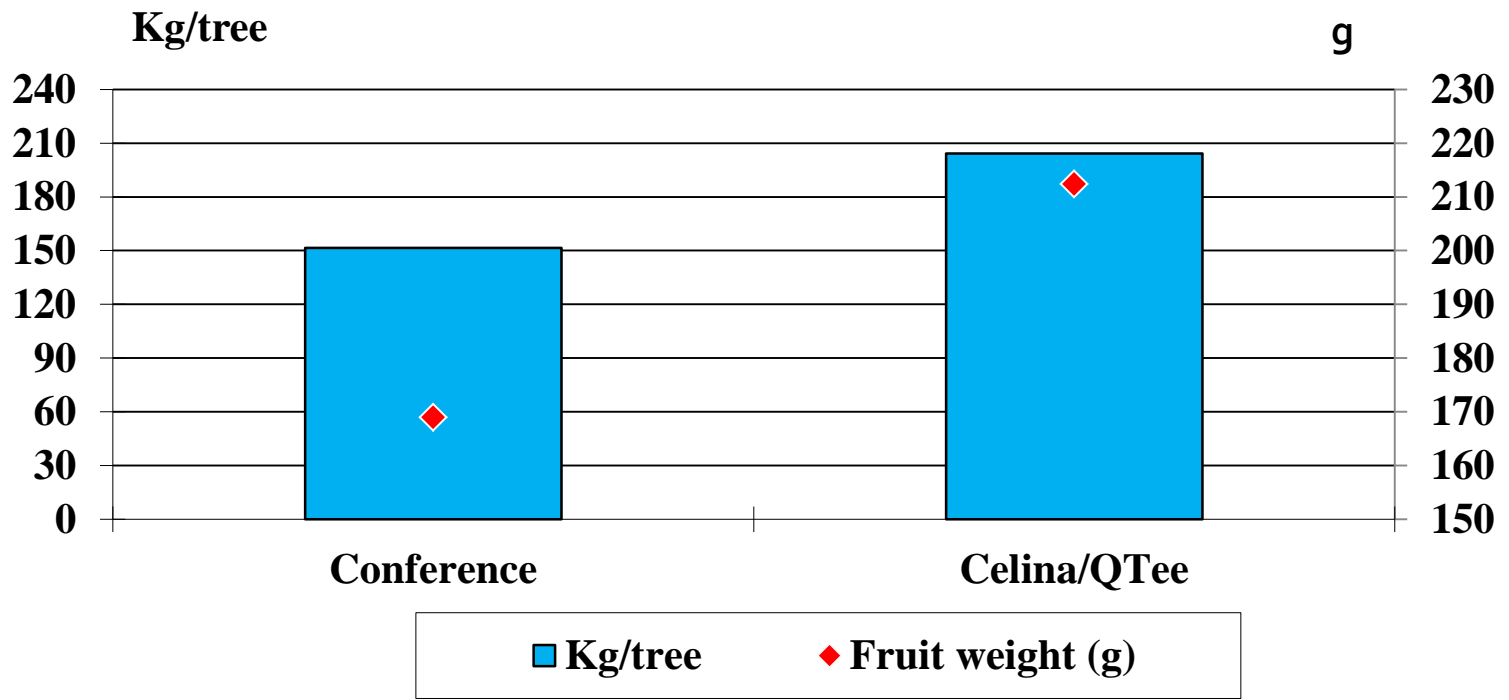
- Colorée de Juillet x Williams
- Norway
- Productive
- Good fruit size (65-70 mm)
- Good taste, very attractive
- Early bloom
- Very few second flowering
- Hand thinning is necessary
- Second half of August





Celina/QTee®

Yield data 2007-2016



Planting year : 2005-2006
Rootstock : Quince C (Condo)
(Conference on Quince Ad. (Condo))



Sweet Sensation®

- Red clone of Doyenné du Comice
- Club-variety
- Good fruit set, but severe june drop
- Colouring can be a problem
- Same vigour as Comice
- Same harvest time
- Taste test with fruit growers
 - 6.4 (scale 1-9)



*Love at
First Bite*





Sweet Sensation

Yield data

Rootstock	Kg/tree	Fruit weight (g)	Kg/tree
	2016	2016	(2006-2016)
Quince Ad.	6.3	412	98.8
Quince C	5.9	399	99.4

Planting year: 2005-2006

Rootstock: Quince C and Quince Adams

Planting distance: 3.50 x 1.50 m (1.714 trees/ha)



Dicolor

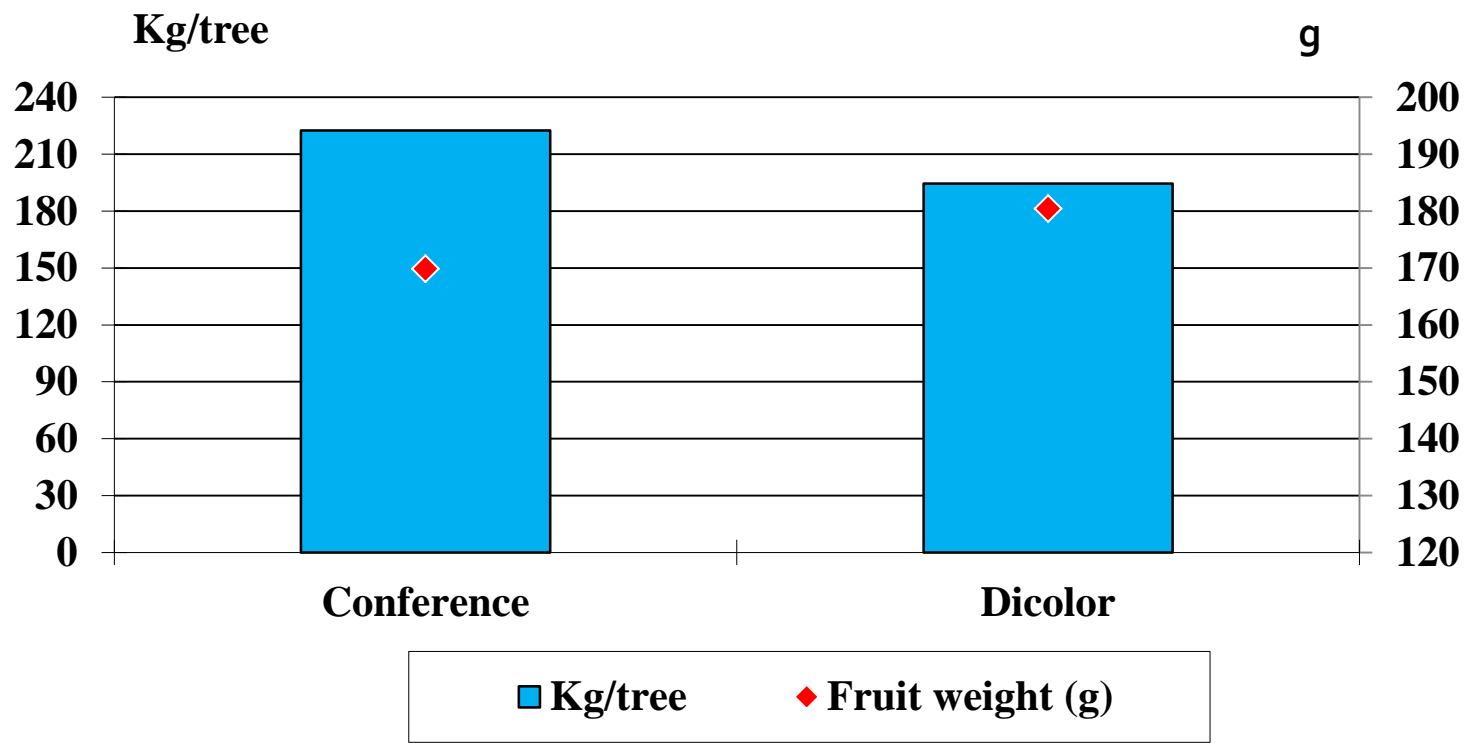
- Holenicka x Williams
- Czech Republic
- Productive
- Early bloom
- Second flowering
- Susceptible to fire blight (**NOT** at pcfruit)
- Long stalk
- Good taste
- Second half of September





Dicolor

Yield data 2005-2016



Planting year: 2003-2004

Rootstock: Quince Adams (Conference on Quince C)

Planting distance: 3.50 x 1.50 m (1.714 trees/ha)



Demands for a new pear variety

Consumer

- Good taste ⇒ **Sweet Sensation®**
- Good outlook ⇒ **Cepuna/Migo®** and **Celina/QTee®**
- Earlier available ⇒ **Corina®**
- Green and smooth, less russeting
 - ⇒ **Cepuna/Migo®**
- Red blush
 - ⇒ **Celina/QTee®**
 - ⇒ **Sweet Sensation®**
 - ⇒ **Dicolor®**



Other candidates??



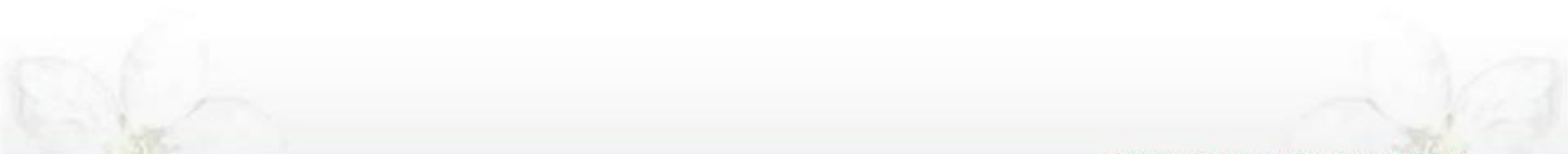
Red Modoc®



CH201



Rootstocks





What are the characteristics of an ideal tree?

- does not grow too strongly
- demands little labour
- each year a good yield
- each year a good quality
 - good fruit size
 - green background
 - smooth





Present situation in Belgium

- Mostly Quince C and Quince Adams
 - mostly sufficient
 - sometimes too much growth
 - too small fruits
 - too much labour for pruning and thinning
- Old orchards partly on Quince A



Frost damage 2009





Rootstock trial for Conference

Russeting 2009

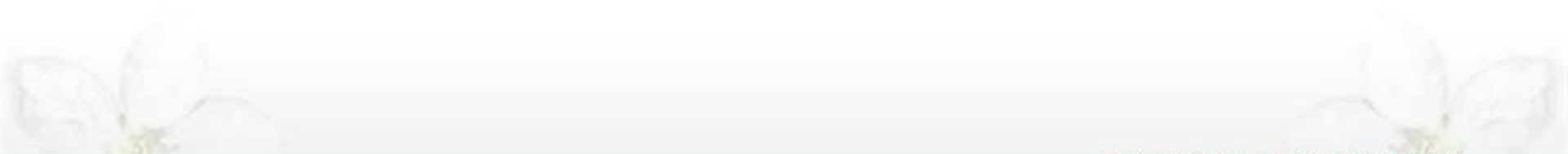


Quince C

Quince Eline



Planting systems





Planting systems for Conference





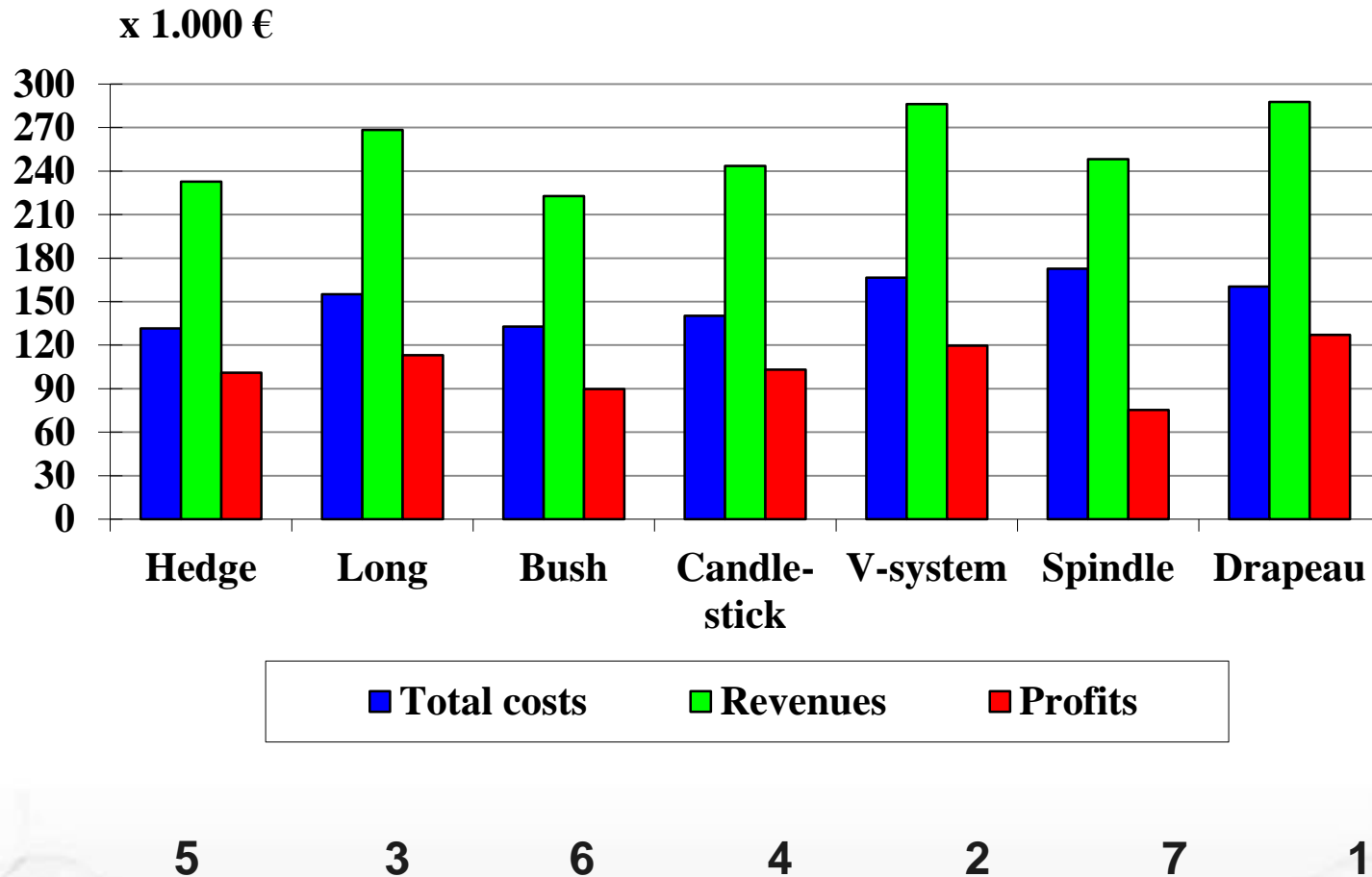
Planting systems for Conference





Planting systems for Conference

Financial result after 15 years





Thank you for your attention!



Conference will remain the most important pear variety in Belgium !