Testing fungicides for effectiveness against leaf blight using harmonised protocol in 2006

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Procedure until 2005

- The ratings were based on the consensus of experience of scientists in countries participating. Data and experiences of different sources were taken into account:
  - Independent trial data
  - Data from agrochemical companies
  - Practical experiences & commercial use
- Inclusion in provisional table is mainly based on data generated by agrochemical companies (pre-registration)
- Transfer from provisional table to Workshop-table is mainly based on independent trial data and practical experiences in farmers fields

Fungicide characteristics (Tallinn 2005)

Product name	Active Ingredient(s)	Effectiveness				Action mode				
		leaf blight	new growing Point	stem blight	tuber blight	protectant	curative	antisporulant	Rainfastness	Mobility
Tattoo C	propamocarb-HCl+ chlorothalonil	++(+)	+(+)	++	++	++(+)	++	++	+++	Systemic + Contact
Shirlan	Fluazinam	+++	?	+	++(+)	+++	0	0	++(+)	Contact
Curzate M	Cymoxanil+ Mancozeb	++(+)	?	+(+)	0	++	++	+	++	Translaminar + contact
Valbon	benthiavalicarb+ Mancozeb	+++	?	+(+)	+(+)	+++	+(+)	+	++	Translaminar + Contact
Dithane	Mancozeb	++	?	+	0	++	0	0	+(+)	Contact
Acrobat	Dimethomorph+ Mancozeb	++(+)	?	+(+)	++	++(+)	+	++	++(+)	Translaminar + contact
Ridomil	Metalaxyl+ Mancozeb	+++	++	++	N/A	++(+)	++(+)	++(+)	+++	Systemic + Contact
Ranman	Cyazofamid	+++	?	+	+++	+++	0	0	+++	Contact
Tanos	Famoxadone + cymoxanil	++	?	+(+)	N/A	++	++	+	++(+)	Contact + translaminar
Sereno	Fenamidone + mancozeb	++(+)	?	+(+)	++	++(+)	0	+(+)	++	Translaminar + contact
Unikat/Electis	Zoxamide + mancozeb	+++	?	+	++	+++	0	0	++(+)	Contact + contact
	Copper	+	?	+	+	+(+)	0	0	+	Contact
Bravo	Chlorothalonil	++	?	(+)	0	++	0	0	++(+)	Contact

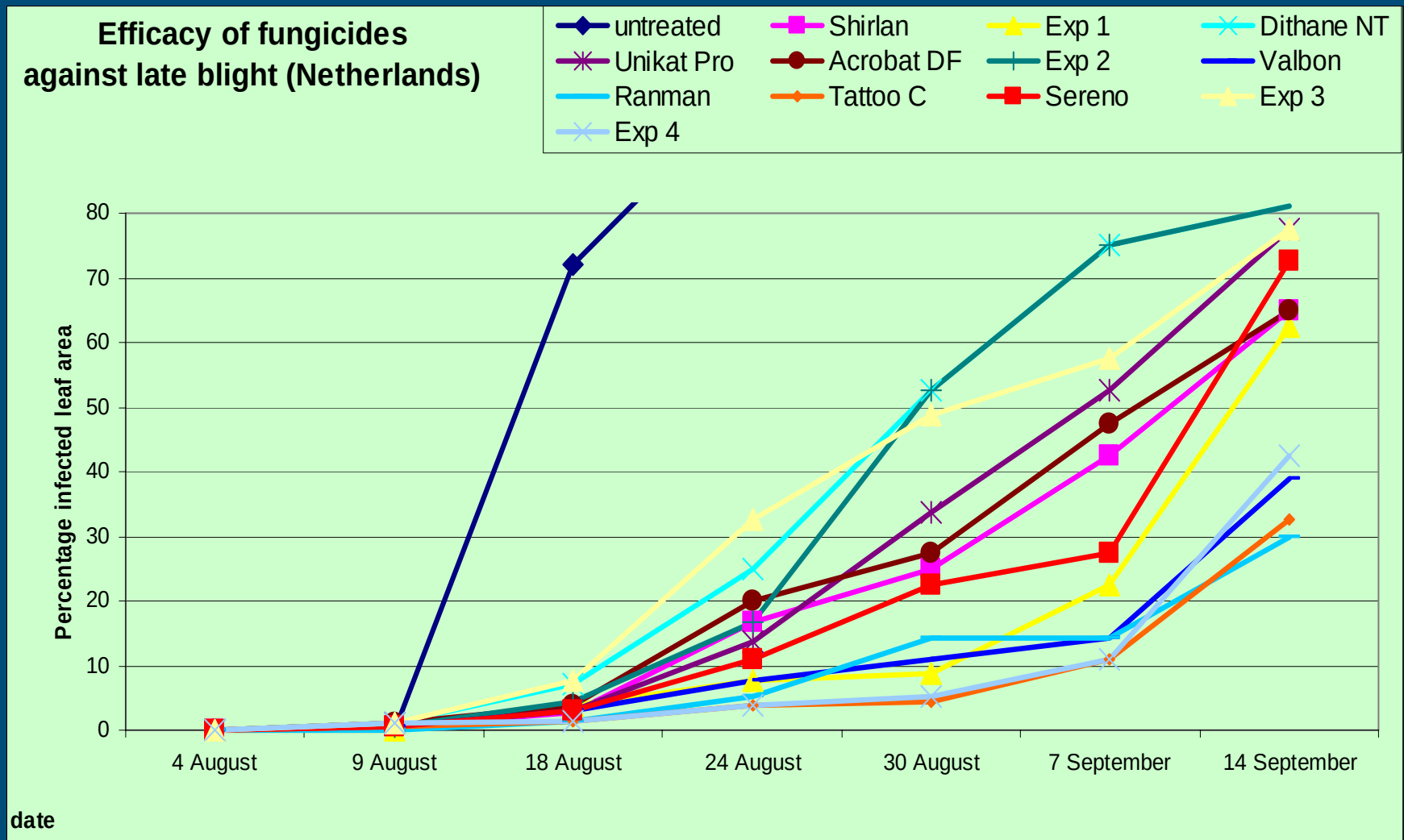
Proposed procedure after 2006

- Harmonised protocol for each of characteristics
- Spring 2006 a harmonised protocol for “Effectiveness to leaf blight” was agreed upon
- In 2006 3 field trials were carried out according to this protocol in UK, DK & NL
- Results will be presented and discussed in next Workshop in Bologna (I) in May 2007

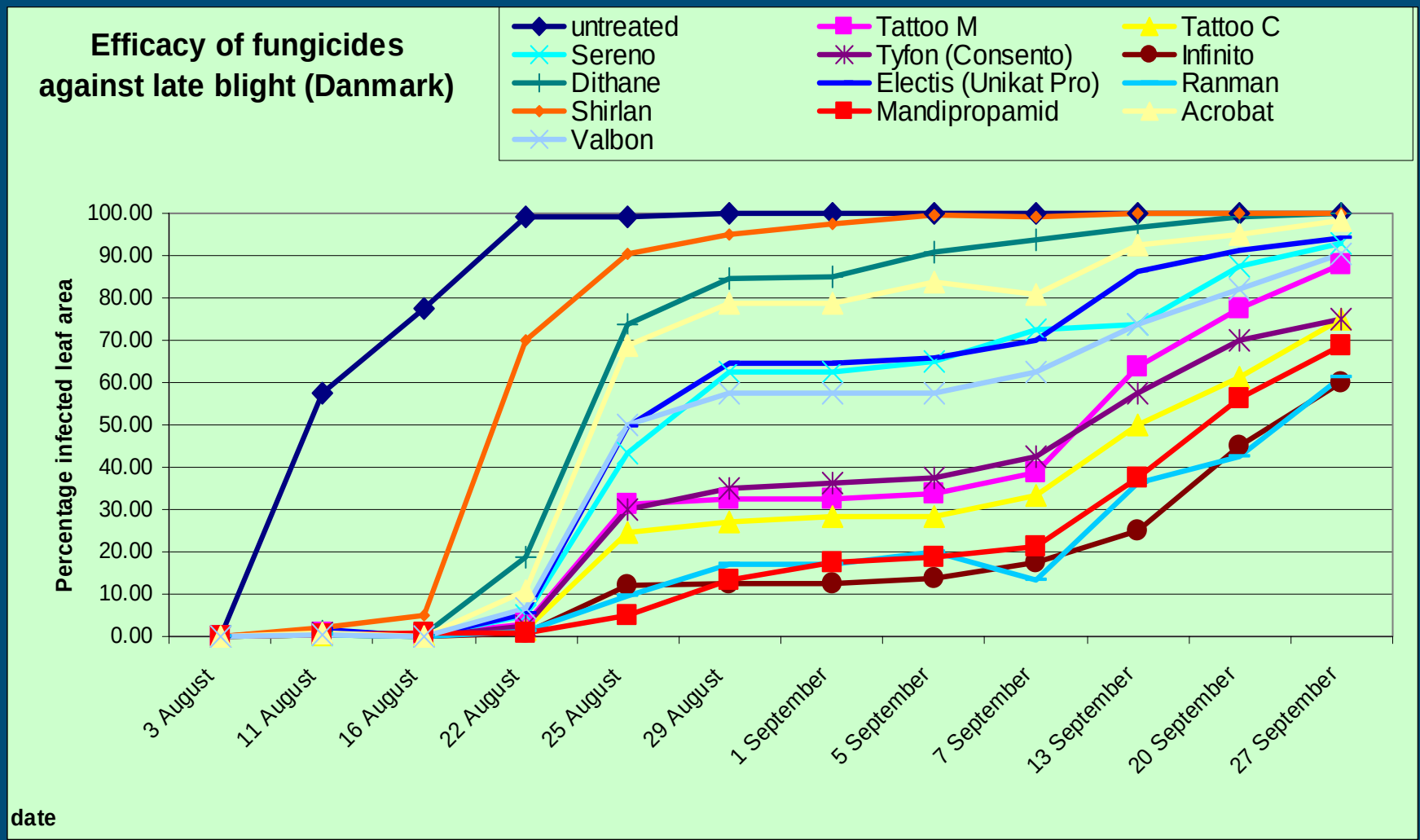
Harmonised protocol for leaf blight

- Susceptible local ware variety
- Spreader rows
- Artificial inoculation early in the season
- Spray frequency every 7 days until desiccation
- Highest preventative dose rate in EU
- Assessment of leaf (and stem) blight
- 6 successful trials (2 seasons x 3 trials)

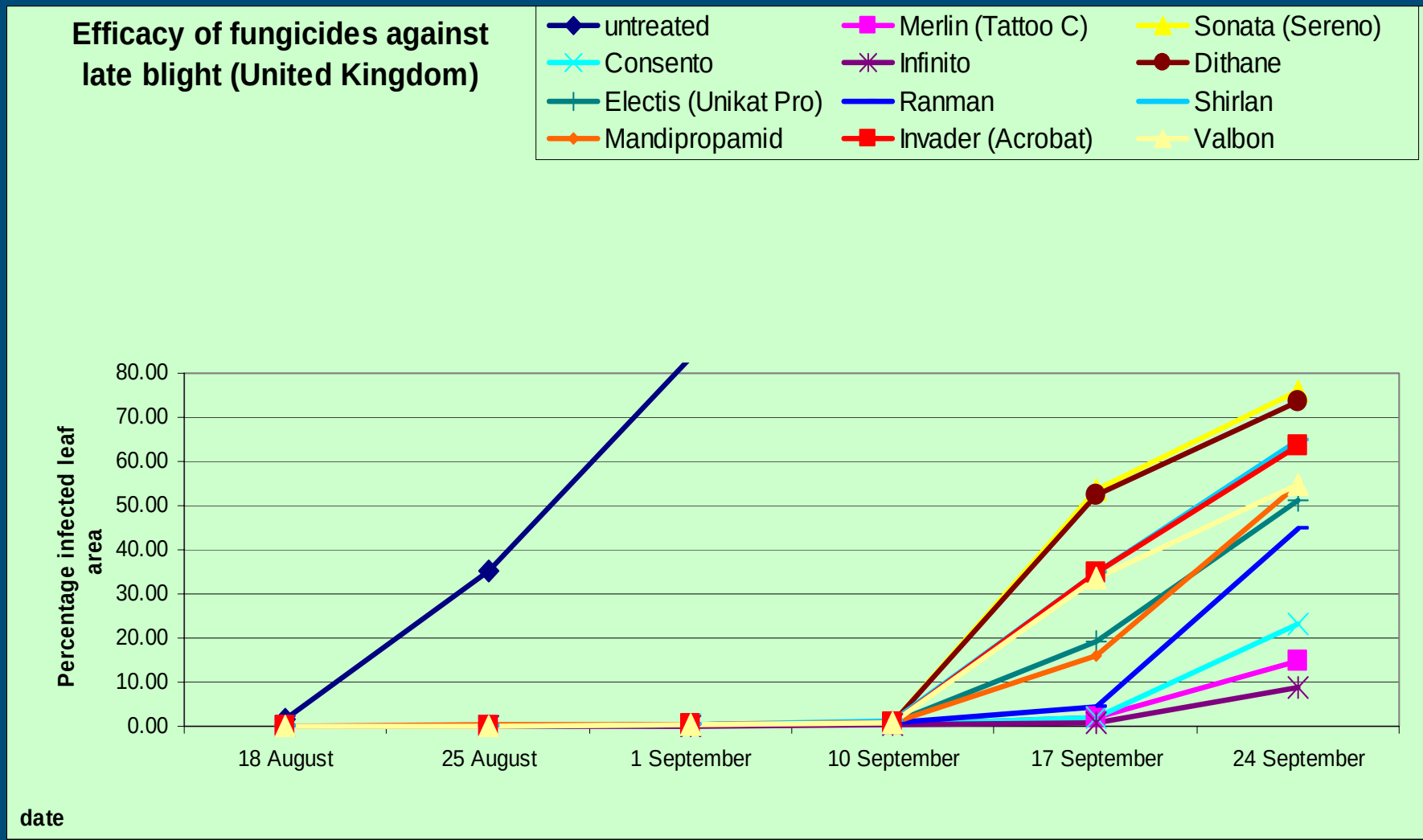
Results NL 2006



Results DK 2006



Results UK 2006



Transformation of data

- Proposal is to use method developed in Eucablight to estimate 1-9 scale values that indicate resistance
  - Calculate rAUDPC from primary disease data
  - Fix score values for 6 standard varieties
  - Linear or quadratic regression
  - Determine value of “unknown” varieties with regression line
- Proposal for fungicide ratings
  - Same procedure as for varieties
  - Fix ratings for “reasonable” and “ very good” fungicide
  - Determine rating of “unknown” fungicide with regression line

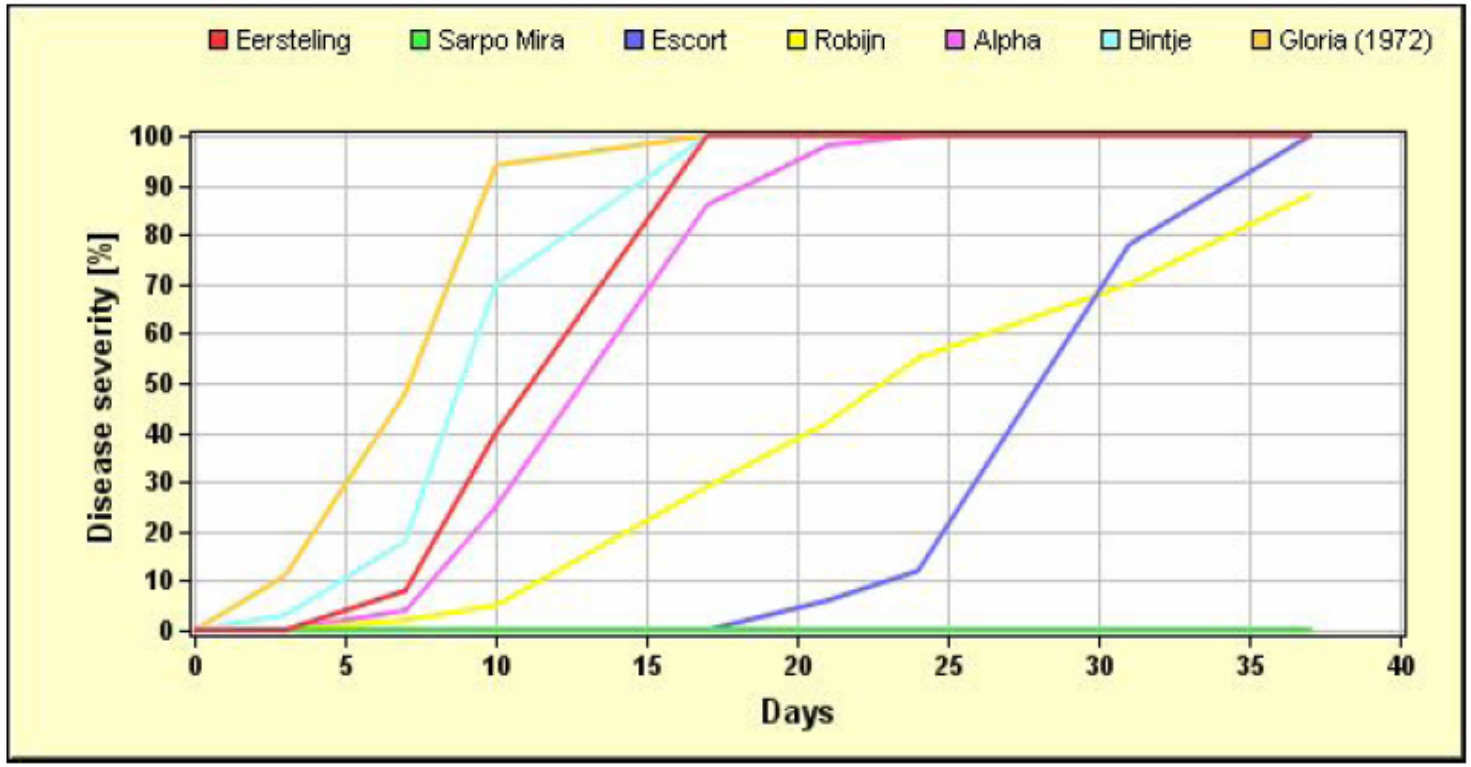


Figure 3. Disease progress curves for Eucablight standards Trial: 2005_DK_05_01

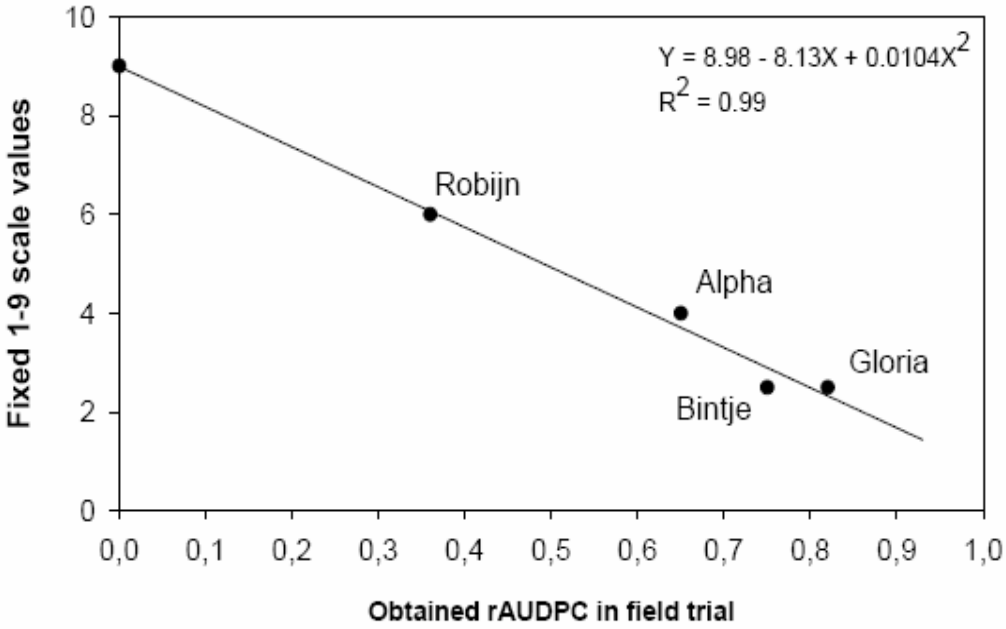


Figure 5. Quadratic regression for Eucablight standards Trial: 2005_DK_05_01.

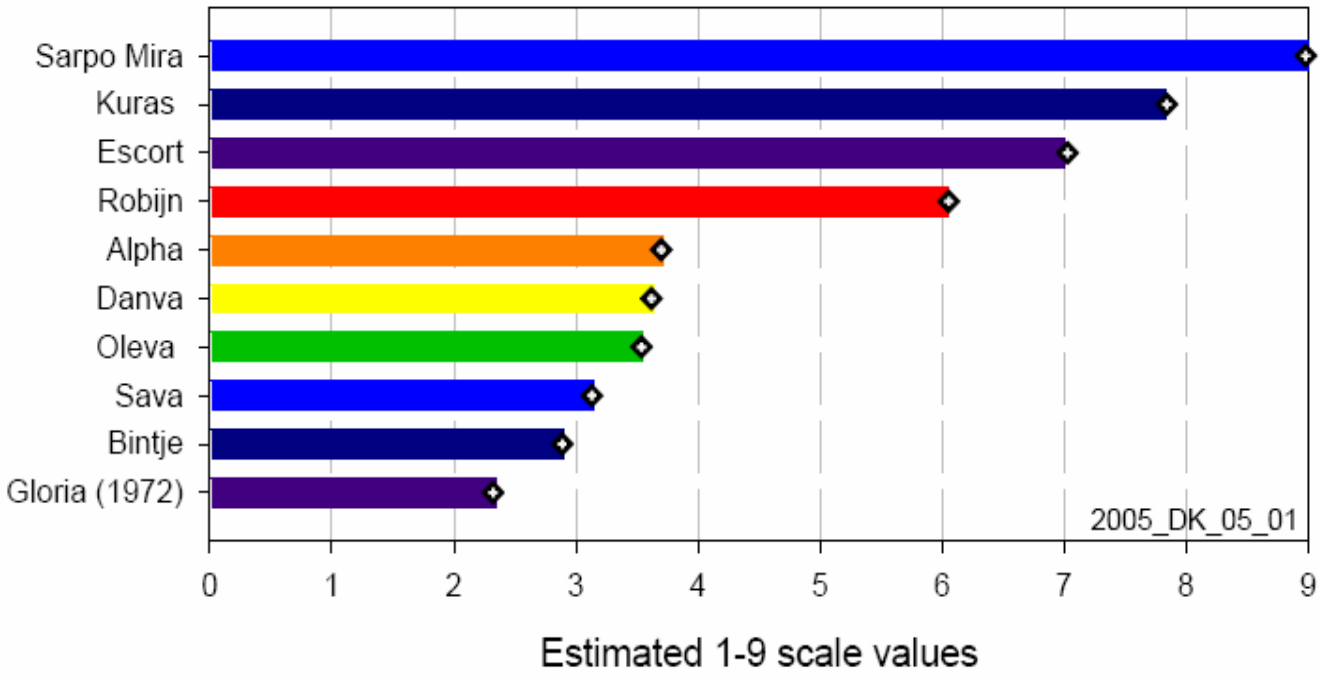
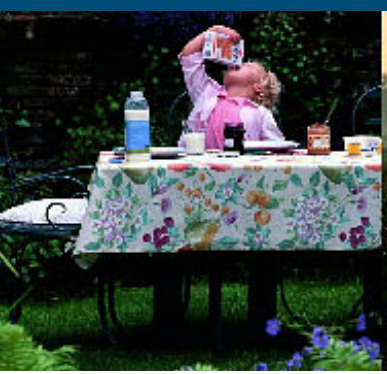


Figure 6. Estimated 1-9 scale values for dataset 2005_DK_05_01. Bars=Linear models A and B and Diamonds = quadratic model

Thank you for your attention





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