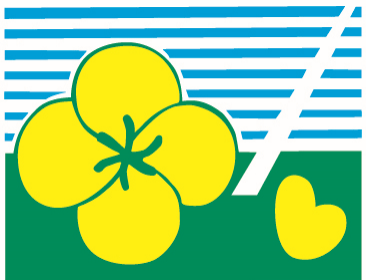


Increased Yield in Winter Oilseed Rape in Sweden

Anneli Kihlstrand

Sveriges Frö- och Oljeväxtodlare

Swedish Seed and Oilseed Growers Association



Sveriges Frö- och Oljeväxtodlare

Swedish Seed and Oilseed Growers Association

- Member organization: 4000 farmers - dedicated to their crop production
- Our crops: oilseed rape, turnip rape, linseed (flax), grasses and forage legumes
- Network of companies within Agricultural business
- Field trials and development projects for our crops
- Marketing and information
- Lobbying in Brussels and Stockholm
- Funded by membership fees and a fee per kg OSR, via the traders
 - (18 SEK/tonne for OSR, 1% of grass/clover payment)



Winter Oilseed rape 2016

2016

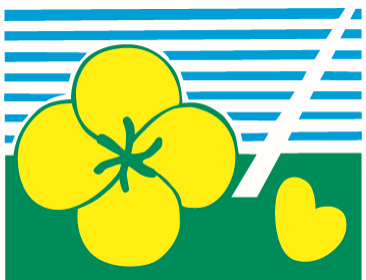
- 83 000 ha
- 3 150 kg/ha

2011-2015

71 500 ha
3 530 kg/ha

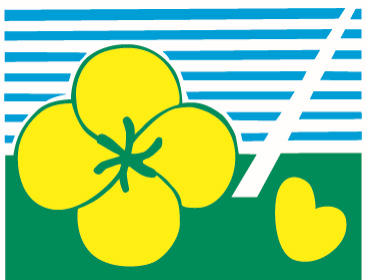
2017

105 000- 110 000 ha



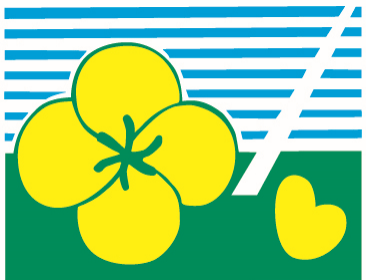
The season 2015-2016

- Late sowing 2015, some snail problems
- Mild winter
- Drought at late spring early summer: May until mid June
- Severe insect attacks:
 - Cabbage seed weevil (Skulpesnudebiller)
 - and later Brassica pod midge (Skulpegalmyg)
 - Diamond-back moth (Kålmöl/kålmål)



Rapsmästaren 2016

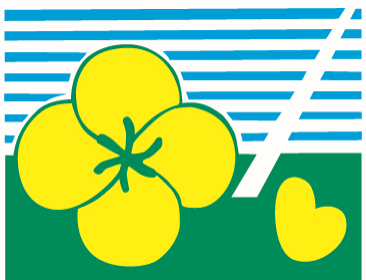
– The Swedish Open in Winter Oilseed Rape



Rapsmästaren 2016

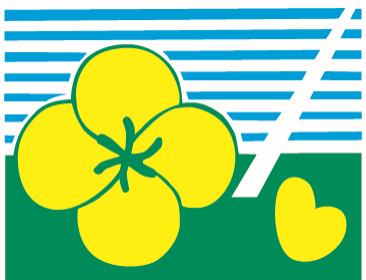
– The Swedish Open in Winter Oilseed Rape

*To challenge and stretch the limits
in order to create new ideas on
how to **enhance yield and profitability**
in the WOSR crop*



Rapsmästaren – The Competition

- 40 team in competition to obtain **maximum yield**
 - Yield measured as crude fat/ha
 - at any cost
- All products available in EU accepted
- Result: Attention, fun, great discussions with all experts at university and at farm level, new ideas which will eventually lead to new field trials and practises in the future.



Let's take a closer look at the competition...



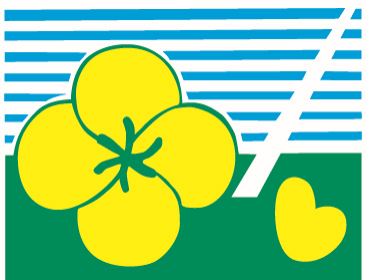
Soil analysis on the competition field

- 15 % clay content
- 3,5 % organic matter
- pH: 6,6
- P-AL: 7,7 (Class III)
- K-AL: 10 (Class III)
- K/Mg-ratio: 0,8

Rapsmästaren – The Competition

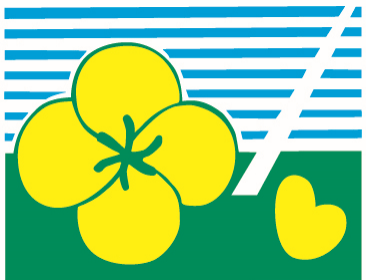
- 40 teams from 7 countries: Sweden, Denmark, Finland, Latvia, England, Germany and France
- 11 different varieties + 3 mixtures, 17 teams chose DK Explicit
(5 DK Exception, 3 DK Extrovert, 2 Einstein, 2 Inuit, 2 PT211, 2 Avatar, 1 Incentive, 1 SY Carlo, 1 SY Harnas)

Result in this years variety marketing trials in south Sweden: 25% difference



Rapsmästaren – The Competition

- Seed rate: between 25 and 80 seeds per m², the winner 35/m²



August 18



The seed germinates uneven



One month after sowing



October 8



November 23



December 14



The roots of the winning team



3 times PGR in the autumn



No Nitrogen



February 17



April 6



Field day, 27 April



May 19, 160 cm



General measures in the competition

Autumn

- 18/8 Sowing and combined fertilization
- 20/8 SluXX (snail repellent, snigelgift): 7kg/ha
- 26/8 SluXX: 7kg/ha
- 26/8 Cabbage seed weevil (Skulpesnudebiller): Fastac 0,3 l/ha
- 19/9 Cabbage stem flea beetle (Rapsjordlopper): SumiAlpha 0,3 l/ha
- 23/9 Waste grain (Spillsäd): Select 0,3 l/ha + Renol 0,3 l/ha

General measures in the competition

Spring - insecticides

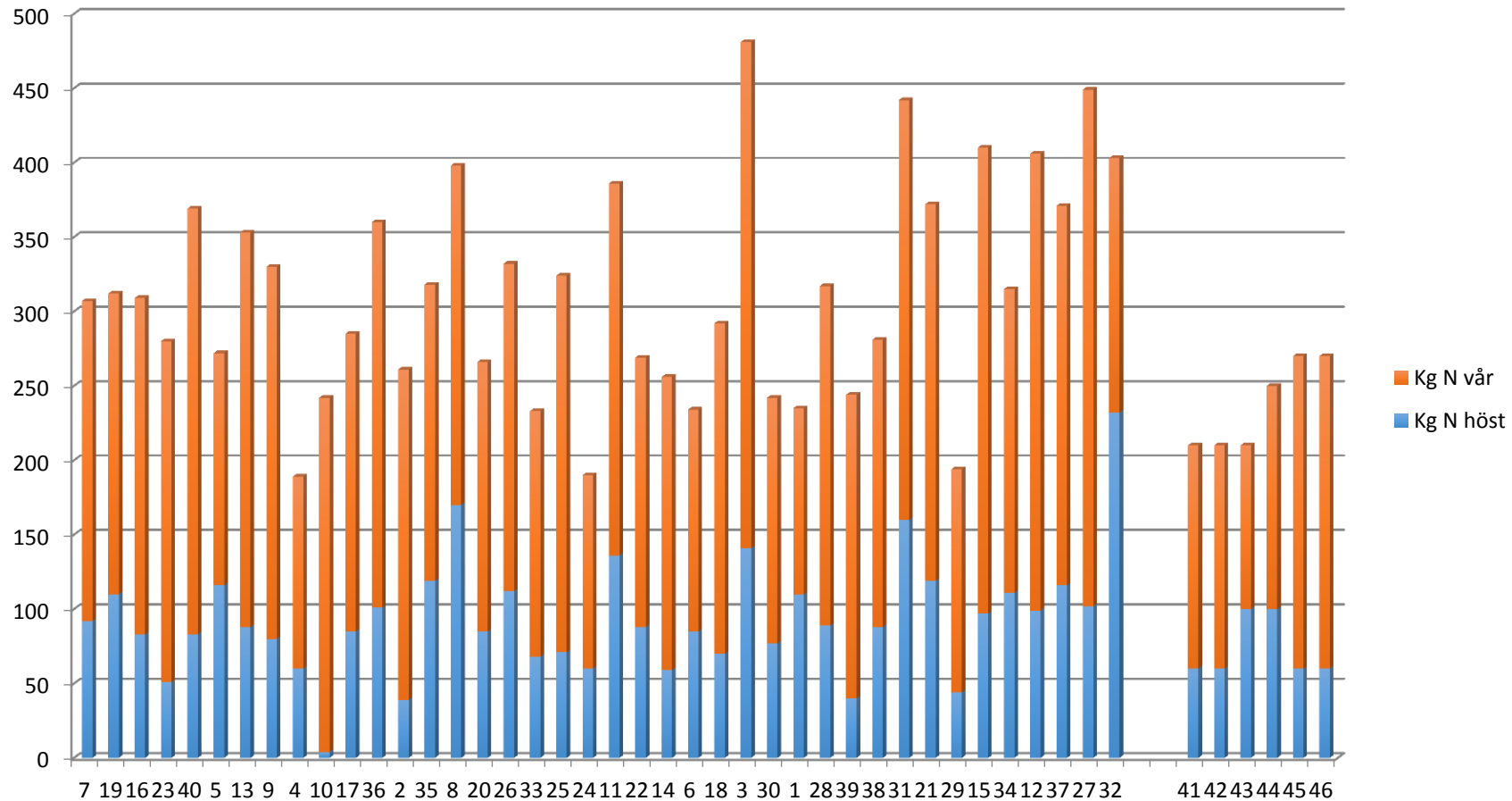
12/4 Mavrik: 0,3 l/ha

2/5 Avaunt: 0,17 l/ha

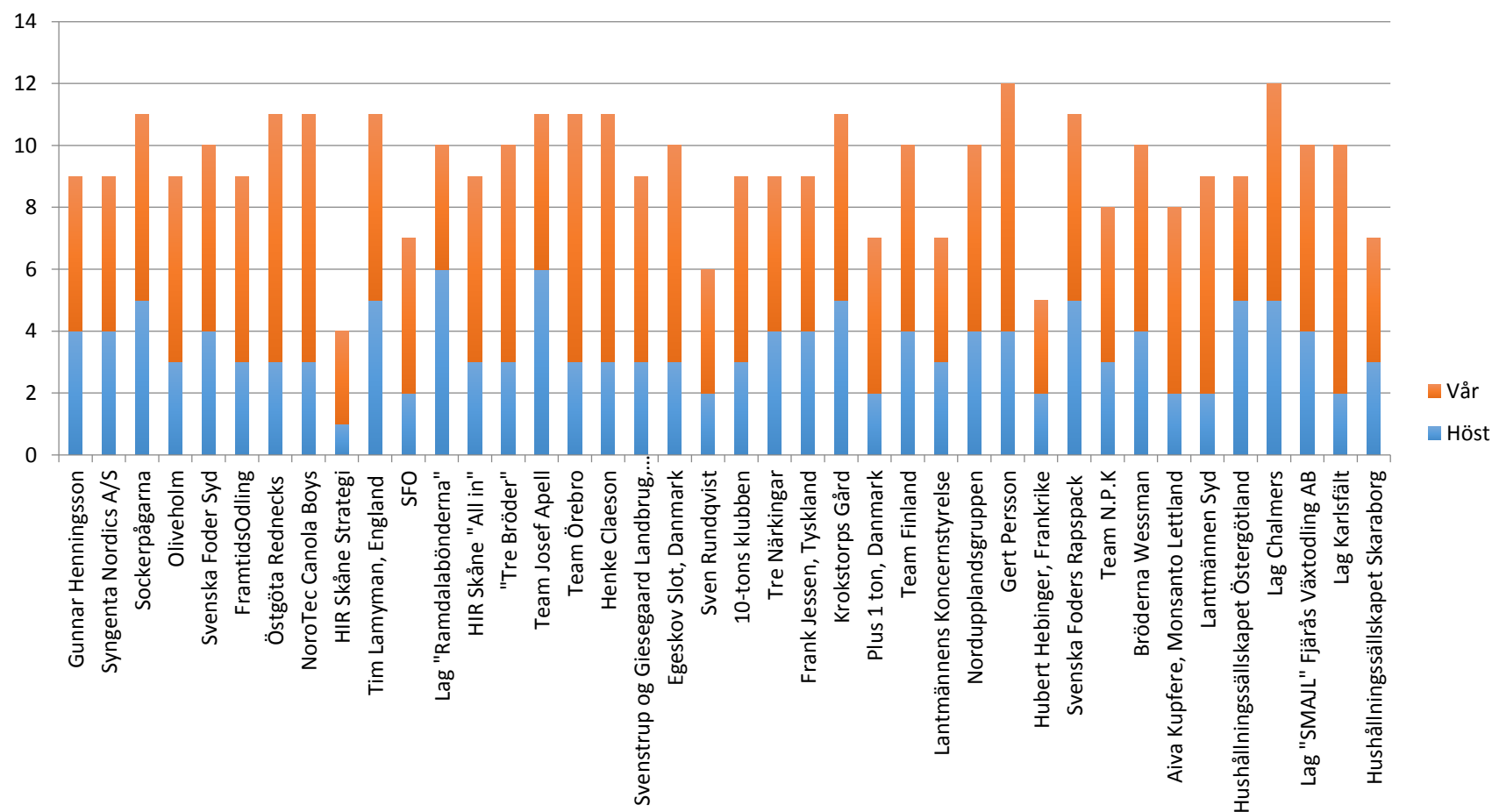
9/5 Mospilan: 150g/ha

19/5 Biscaya: 0,3 l/ha

Nitrogen fertilization, autumn + spring



Number of applications, max 12



PGR - Plant Growth regulation

- 0-3 times in the autumn
- 0-2 times in the spring
- A number of products

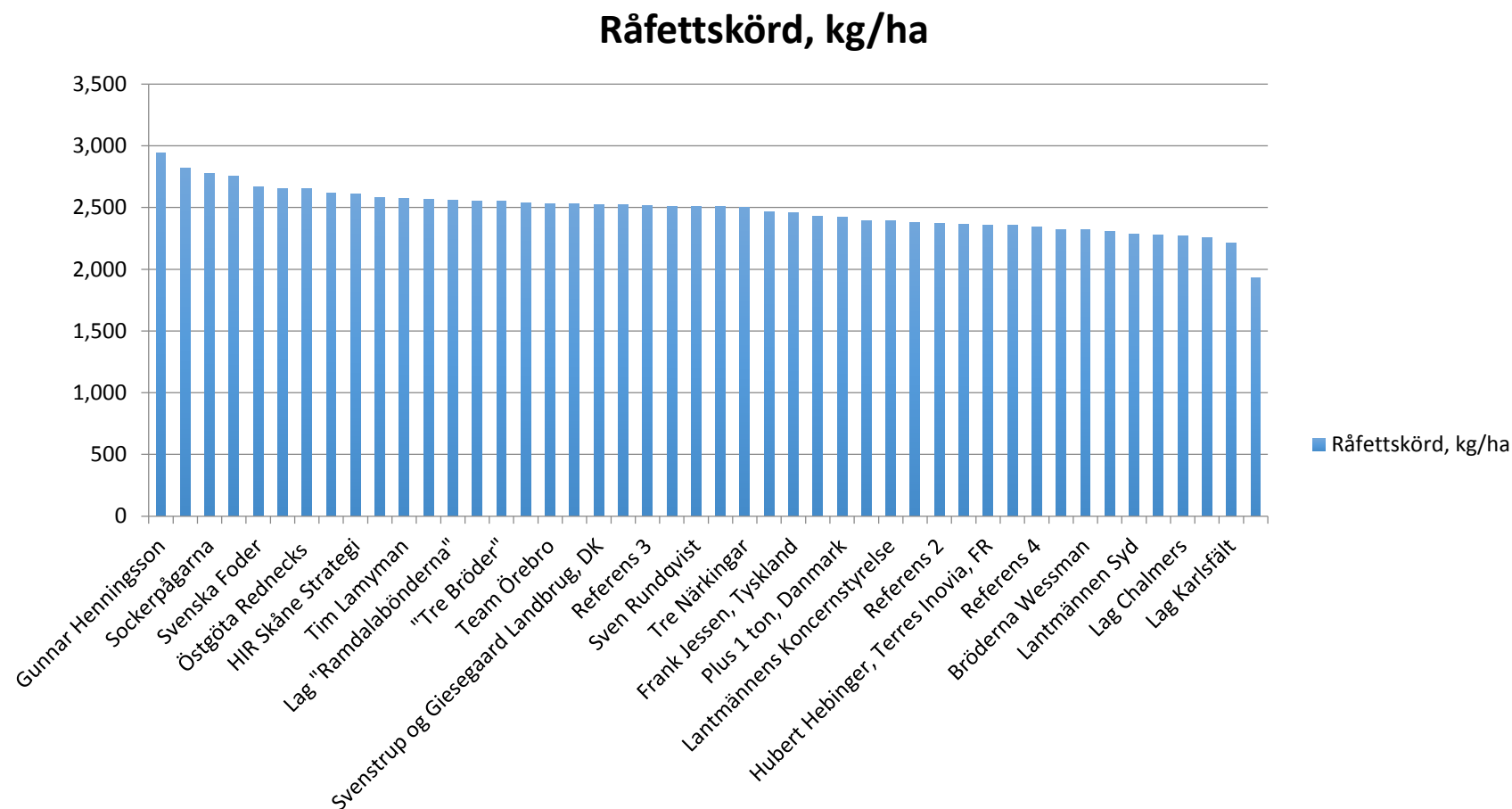


The winner: Mr Gunnar Henningsson:

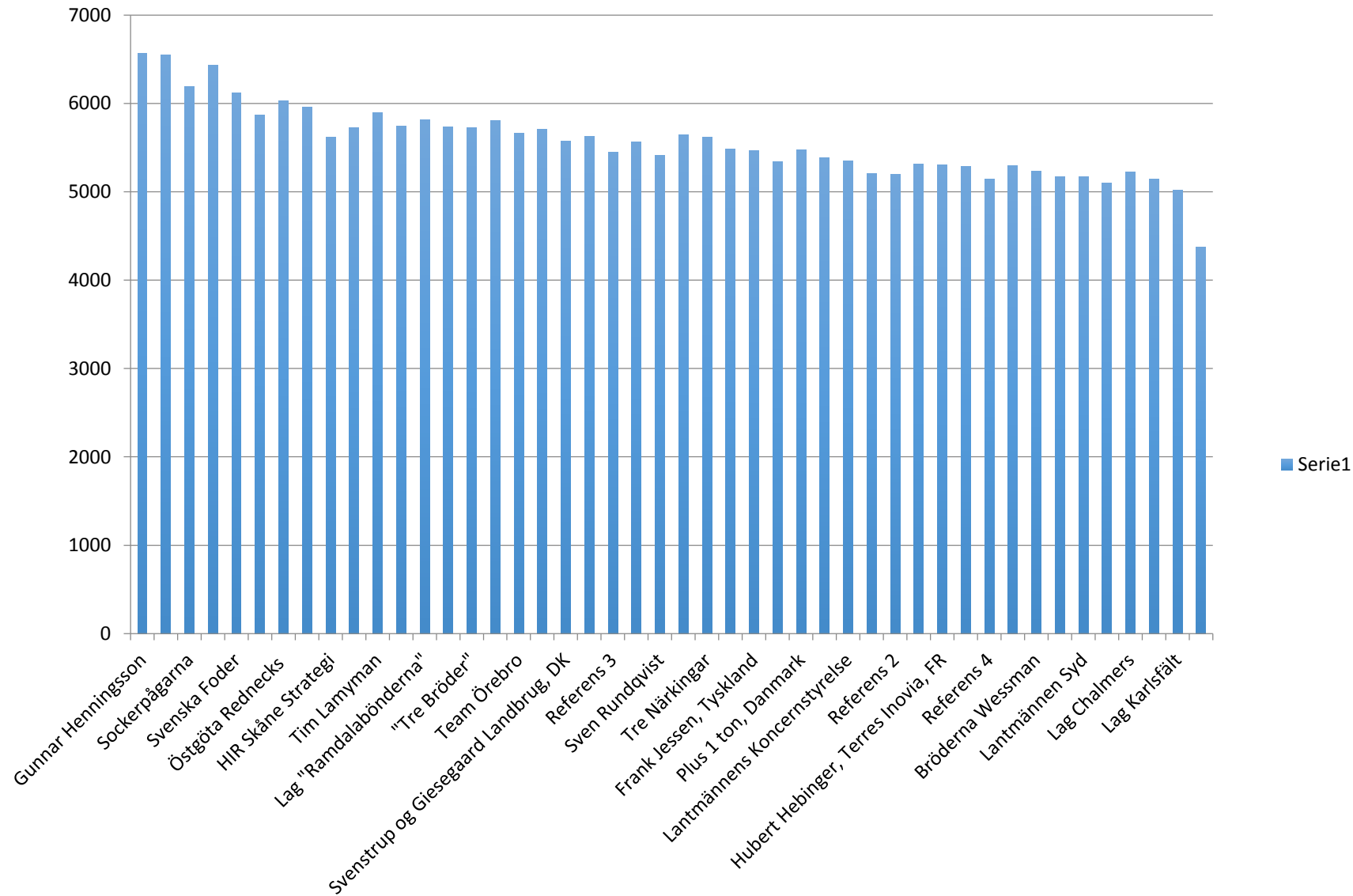
2 942 kg/ha as crude fat yield (6 570 kg/ha grain yield, at 9% water)



Result: Crude fat yield (råfettskörd), kg/ha



Result: Seed Yield (fröskörd), kg/ha



Summary by the Winner – Gunnar Henningsson

- Preparation and study. Discussed with his extensive network in Sweden, Denmark, England and Germany.
- Spent much time on the field, followed the crop closely - perfect timing
- DK Extrovert, 35 seeds/m² – not too dense canopy
- Balanced level of N (autumn 90 kg + spring 220 kg)
- Potassiumnitrate (Unika Kalium, NK 14-38) to enhance winterhardiness
- Balanced PGR in autumn Caryx 0,35 l/ha + Caryx 0,35 l/ha
- Late application of insecticide and fungicide at flowering

The Future of WOSR in Sweden

- Swedish farmers are eager to grow WOSR: 110 000 ha 2017...
- Challenges are there in
 - Establishment
 - Lack of tools – i. e. Plant Growth Regulators
 - Insects...
 - Lack of approved herbicides
 - Increase in soilborne diseases – Club rot
- Challenges in EU policies
 - ILUC – Indirect Land Use Change
 - RED – Renewable Energy Directive
 - Some hard work to do...

Thank You for your attention!



*The hard but equitable judge herself together
with the lucky winner, Mr Gunnar Henningsson.*