

Experiences about yield competition arranged
by Käytännön Maamies,
Finland 1995 - 2004

Based on interview of Esa Mustonen by
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How the competition started in 1995

- Idea from Paavo Tuovinen, further developed by Esa Mustonen and Pentti Törmä
- first crop was **barley** only for some years
- later on two crops as options: **barley and rye**
- in 2000 also **oats, OSR and wheat** were included
- then farmers wanted to choose crops themselves and other crops came into picture, like **buckwheat, sunflower** etc.
- Only requirement for the crop is that it should be harvested by combiner
- Also organic farmers have participated
- Number of participants 10 – 25 in the latest years

Procedure

- open for all farmers, undepending on farm size
- preregistration into the competition in March
- confirmation in May, decision on crop only
- the field finally had to be decided at mid-July
- every farm visited by KM journalists
- harvesting and measurements done and controlled by official advisory organisation people
- In the beginning appr. 10 are(100 m²) as harvested area, later 1 ha as minimum: more reliability achieved
- Yield result expressed at standard moisture content

Basic rules (1)

- first the highest yield was the winning criteria only
- later actually two competitions
 1. Yield competition
 - All measures allowed (even against environmental limits)
 - Highest yield matters only (not e.g. quality, like protein)
 2. Economy competition
 - margin 1 calculated (income/ha – variable costs)
 - possible to win with special crops with low yield but high price /kg
 - quality pricing of importance here

Basic rules (2)

- farmer has to take records during the season: how this was achieved
- after mid-July not able to change the field any more
- farmers responsible to deliver the information to KM and further to other farmers
- farmer's own records have not been controlled
- at harvesting and yield quality analysing procedures official organisations were utilised

Prizes

- Farm inputs to the winners, the first prize appr. worth of 1 700 €
 - Fertilisers
 - Pesticides
 - Devices like cereal moisture instrument
 - Various inputs at a certain price, free choice
 - Cash from banks
 - Etc.

Experiences 1.

- farmers have learned openness
- farmers have tested different cultivation methods than usually
- results have shown that very high yields are possible in Finland
- politicians worried because the statistical average yields low compared to the top yield here : what happens to EU support?
- active farmers have got new motivation and knowledge
- nutrient balances of high importance and interest, especially for enviromental reasons

Experiences 2.

- high yields achieved every year, over 8 t/ha on cereals
- only the top producers could be on positive side economically without subsidies
- 2001: yield of winter wheat was 10 076 kg/ha
- 2003 buckwheat farmer won the economy competition
- once the winner was a farmer from southern North Finland (near Oulu)

Example on results, wheat, economy, 2001

Farmer/ yield, t/ha	Wheat price, €/t	Value of yield, €/ha	Subsidies , € /ha	All income, € /ha	Variable costs /ha	Margin 1 € /ha	Margin 1 without subsidies €/ha
1. Timo Laaksonen 10,1	132	1327	622	1949	437	1511	890
2. Pasi Järvinen 7,1	142	1002	645	1647	388	1259	614
3. Niko Ahlqvist 8,1	133	1076	622	1698	547	1151	530
7. K. & H. Sjölund 5,3	136	726	622	1348	447	902	279

What to do to get 10 t/ha winter wheat in Finland?

- Timo Laaksonen's recipe:
 - Variety Kosack
 - Soil type loamy clay with high org. Matter
 - Preceding crops barley and w. wheat
 - Soil fertility very high: pH over 7, Ca, P, K and Mg all high / very high
 - Seed dressing with carboksine (Täyssato)
 - Seed density 550 seed / m²
 - Sowing date 28.8.
 - Growth period 362 days

What to do to get 10 t/ha winter wheat?

- Fertilisation :
 - 100 kg /ha FinnCan (26-0-1) in autumn = 26 kg N /ha
 - 450 kg/ha FinnCan in spring = 117 kg N /ha
 - 150 kg/ha FinnCan later in season 39 kg N/ha
 - Total N during season 2001 156
- Crop protection:
 - Express 1 tbl + MCPA 8 dl + CCC 5 dl + Sito 1 dl
 - Tilt 0,25 l + N liquid

Analysing the result / nutrient balances

Farmer	N	N	P	P	K	K
	Applied	Removed by crop	Applied	Removed by crop	Applied	Removed by crop
Laakso- nen	182	184	1	30	7	39
Järvi- nen	139	156	10	21	19	27
Ahlqvist	153	158	15	24	27	31

If yield exceeded 6 t/ha, all nutrient balances were negative.

General remarks

- most of the participants from southern/ western Finland
- same farmers participated many years (one farmer 7 times)
- best fields chosen for competition, average yield 20 – 40% lower than the best 1 ha in competition
- year 2005 no competition arranged
- year 2006 start again

Development ideas

- Updating / fresh ideas needed every 3 -5 years, otherwise motivation decreases
- Laborious issue for organisers : visits, harvesting, analysing etc.
- Still competition will continue in 2006
 - International: Swe, Den, Baltic countries considered
 - New crops, various categories, new aspects
- newest competition already arranged:
 - Silage making competition, quality criteria only
 - "best silage making farm" selected
 - First evaluation based on silage sample sent to the organisers, then farm visit and deeper analysing before deciding the winner