

# Success at the International rapeseed competition

„Rapsmästaren“, an International crop management competition in oilseed rape took place already 2nd time in Sweden during the last growing season 2019/20. Czech Republic (CZ) was invited as traditional rapeseed country to participate in this competition. The championship run in an untypical maritime climate in southern part of Sweden close to Trelleborg. We are pleased that the SPZO team represented by Dr. Petr Baranyk from the Czech Republic achieved second place in a group of 40 participants. Additionally we are proud that this success was achieved by the market leading RAPOOL hybrid TEMPTATION.

We asked the reigning runner-up, Dr. Petr Baranyk, about the Rapsmästaren competition.

Hello Peter, once again congratulations to your international triumph at Rapsmästaren. Can you tell us more about the way to this success and the differences in principle, especially with the climatic conditions in Sweden?

- We got the information about the planned Rapsmästaren competition in summer 2019 at the GCIRC Congress in Berlin. This competition is the Swedish answer of the German rapeseed crop comparison, which was running in the past at the DLG Field Days. Nevertheless, I have to admit that this competition was a completely new experience for us. Competing under unknown environment with 30 Swedish participants with knowledge about soil climatic conditions was not supporting a successful participation. Finally, we accept the invitation if we heard that nine other foreign companies were taking part.

The Trelleborg area belongs to the humid areas, already in autumn the soils were very wet. Medium-heavy soils - nothing extraordinary, but under Swedish conditions the growing area is one of the most fertile in the whole country. We noticed the high pH value of 8.3. We received the field map showing the stock in individual elements. While the pH and Mg were homogeneous, the P and K stocks were relatively different. This was strange for us. The question was, where are our plots?



Where could you influence the Rapsmästaren competition trials?

- We could influence or choose the following factors: Variety selection, seeding rate, fertilization, growth regulators and stimulators.

Did you used seed treated seeds?

- Yes, the seeds of all varieties were uniformly treated with the insecticide seed treatment Lumiposa. An additional fungicide treatment was not carried out.

In the video from autumn, you could clearly see how heavy the soil was. Did you were not concerned about the reduced germination capacity and the number of emerged plants with a sowing rate of 40 grains/m<sup>2</sup>?

- I will tell you the truth, neither the information about the status of the plot or any communication about measures taken got through to us. The video appeared at a later date. The emergence was problem-free because of the followed rainfall. We considered the crop density to be optimal with the selected sowing rate. We know from our trials that TEMPTATION is characterized by rapid development and strong self-regulation.

I noticed that the ERFA Halland company, which won the competition, applied a total of over 300 kg N/ha with the RAPOOL hybrid SMARAGD. I have 2 further questions:

1. Regarding nitrogen fertilization, there is no restriction on N fertilization in Sweden?
2. And my second question is focused on economics, you have achieved with TEMPTATION a yield of 6.99 t/ha with 225 kg N/ha. The

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ERFA company achieved with a higher intensity just 188 kg/ha more. So, who actually won the competition?

- The application of fertilizers and plant protection products has not been limited, not even the total nitrogen application. We thought that the nitrogen fertilization of 225 kg N/ha was one of the highest applications, as is the case in CZ. After the end of the trials we found out that some companies exceeded the application of 300 kg N/ha, we did not expect such a thing. We do not know the limits of fertilization in Sweden and in Rapsmästaren the main goal was to achieve the highest oil yields, regardless of how much it will cost. The economic aspect has been checked, but it was only the criterion for assessing the results. If this matter had been calculated, the SPZO team would have been the real winner.



Which key factors were decisive for you?

- The most important decision was the choice of variety. It is always a risk as we just know the variety performance under our soil-climatic conditions. We recognized that TEMPTATION from RAPOOL is among the hybrids the best in grain yield and oil content from this point of view. So, TEMPTATION has been the most attractive hybrid for us. We had no idea before how the variety would perform under soil-climatic conditions in southern Sweden. It is a known fact from the past that a variety is successful in one country and only average in another country. The second key factor was the fertilization strategy, where the right decisions regarding fertilizer, application date and quantity had huge impact. I guess that besides the variety choice, the right fertilization strategy had a very important impact. I am grateful for the help of our SPZO advisory service and especially Dipl. Ing. Jindrich Cerny from CZU (Czech Republic Agricultural University) Prague, who worked out an exact calculation of the fertilization strategy from the available data. We discussed individual steps or measures together, against the background of the current climate situation in Trelleborg. Later on, we made a common decision.

Did you already notice anything interesting in the cultivation technology of the other participants?

- Among 40 participants in the competition, there were extremely high differences in the intensity of the cultivation technology. Differences of 80 - 300 kg N/ha were recognized in their nitrogen applications. Some companies planned their fertilization strategy in a minimalist way - for example 60 kg N/ha in autumn, only one application of 200 kg N/ha in spring, once Belkar, once Mospilan. That was all. In contrast, other companies have taken all the measures that are existing.

It was also a surprise for me how differently the sowing rates were chosen: From 25 to 70 seeds per m<sup>2</sup>. If we look at the result table, we see that there are no clear differences among the 10 best companies.

Do you consider participating in other competitions in rapeseed cultivation in the future?

- Rapsmästaren only takes place every 4 years. Many years ago, we took part in a rapeseed crop management comparison as part of the DLG Field Days. At the moment, we have no information about other international cultivation competitions. However, if we get such an opportunity in future, of course we would be interested in participating again.

Thank you for an interesting conversation and I wish you many good yields with RAPOOL hybrids, not only in the trials but also on the fields in practice. Bc. Pavel Stárek, Rapool CZ s.r.o.

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