



Summary from DFA CA network group meeting at DanSlovakia

By Frederik V. Larsen, Crop Consultant at Agrognic

The Danish Farmers Abroad Conservation Ag network group meet on the 8th and 9th November in Slovakia. The tour was planned and hosted by DanSlovakia Agrar (DSA). The group is an arable production network group for arable department directors and their highest-ranking managers. Currently the main geographic area of participants is southern half of eastern Europe including Ukraine and Poland. The working language of the group is English.



The CA Network Group at Dan-Slovakia, November 2023

Main topics for our time together was an intensive field tour with focus on the many current development projects of the DSA arable department but also to discuss and share solutions for everyday management challenges including best practice slurry management, machinery strategies and workforce management.

Main topics on the arable tour of DSA was: No till transition project farm, Organic Farm, general cover cropping approach and mice management.

The climatic context has to be kept in mind. It has been increasingly dry during the last five years in Slovakia. But at the time of visit a large rain storm had provided a large quantity of water so most fields were very wet with standing water. This is in principle very good news but have unfortunately delayed winter cereal seeding at DSA which was not yet finished.

No-till transition project farm:

Commencing last year DSA have taken one sub farm (850 ha) and started a no-till transition project. This is on some very challenging high clay content soils which regularly is a major challenge to cultivate. The goal of no-till at this soil type is to increase topsoil carbon content in order to make the soil more workable and



Danish Farmers **ABROAD**

provide more reliable crop establishment. In general, no-till winter wheat and barley (precrop sunflowers and corn) was looking good. Prior to seeding slurry was applied with a recently retrofitted low-disturbance slurry injector. Crops looked good and uniform.



Winter barley in corn stubble. Slurry injected prior to seeding.

Cover crops:

Post-harvest cover crops were seeded in fields going into spring crops. Cover crop mixtures included: Phacelia, crimson clover, winter peas, vetch. In general phacelia was dominating the biomass production. Some fields were mainly phacelia with a low emergence of peas/vetch. We discussed the importance of herbicide legacy effects and their effects on cover crops especially in a dry spring/summer environment. But also, the large effects of soil residual N (from slurry) which will provide a competitive advantage for phacelia relative to legumes.



Nice and dense cover crop at DSA



Mice management:

Mice is a very big challenge for DSA in the drier climate recently as well as less winter killing frosts. No one solution fits it all is currently available which is a major headache for both DSA but also the other dryland farmers of the group. Many approaches and ideas were reflected upon and discussed. Some chemical products are available in the different countries, but also cultural techniques. The group agreed on a dual strategy with the need to focus on a short-term solution while working on a long-term solution as well. The short-term solution includes in crop management like chemicals, rolling, raking, suitable tillage etc. The long-term solution should be habitat management for mice predators (foxes, owls, birds/eagles). A novel approach to this habitat can be the new opportunities for agroforestry in the EU CAP reform with very large subsidies to plant tree/bush rows in the fields without changing the agriculture status of the field/strips. The added benefits of agroforestry strips in the arable fields are wind speed reduction/management which has the potential to reduce crop evapotranspiration by 20-25% which is a huge benefit in dryland farming. (solar panels in wide rows can also do this, it is called Agrivoltaics).

Slurry management:

Recently DSA has refurbished a Samson grass land slurry injector into a no-till slurry injector. The results in the field were very encouraging. Both because the soil surface was not disturbed much during application (which is good for trafficability later in the autumn and weed germination) but also because the injector is 12meter wide which reduces the normally severe compaction risk of smaller traditional injectors.



Refurbished Samson notill injector by DSA.

After a long and very inspiring day the group returned to the hotel and continued to discuss the many ideas and impressions of the day.

Company visit: Cover crop seed factory:

On day two the group started at DSA with an inspiration presentation by Frederik before driving to the Hungarian Cover crop seed company Pannon-Mag Agrar. Frederik presented his ongoing development work of integrating a 4-year perennial alfalfa nitrogen “engine” while each year harvesting a cash crop. This



**Danish Farmers
ABROAD**

production system also has its possibilities, limitations and challenges in a dryland farming context and was and a good discussion commenced among the group participants.

After that the group went off to visit the Pannon-Mag Agrar cover crop seed factory in Mosonmagyaróvár in Hungary. The company specializes in the production and multiplication of cover crop seeds and especially phacelia seed. The company also provides customer specific seed blends which was of interest for the group members.

After two long days - the group separated and departed home full (and tired) of many impressions and new shared ideas.



The CA- Network Group in front of PannonMag cover crop seed factory.