

biowad

Newsletter

April 2015



Planty Organic is a study into a new and innovative agricultural system in general and the nitrogen cycle in particular. The study started in 2012 and is carried out at the Kollummerwaard model farm in Munnekezijl (on the boundary of Groningen/Friesland). More information about this interesting study can be found at the website www.biowad.nl.

Looking back on 2014

2014 was the third year in which the Planty Organic farming system was put into practice. At the Kollummerwaard trial farm in Munnekezijl, crops are being grown in six fields from which soil and crop samples are analysed. The fertilizer used originates entirely from the Planty Organic system. Nitrogen fixation by clover-grass, the engine of the system lagged behind expectations. As a result, the total quantity of nitrogen available was approximately 20% lower than the assumptions in the design. The nitrogen measured in the soil was compared to the calculations derived from the NDICEA nitrogen model. The match between the measurements and calculations is sufficient to good, with the exception of grains, for which the measurements were structurally lower than the calculations. This was also clearly visible in the fields, as was the case for grains in 2013. The wheat, rye and, to a lesser extent, squashes harvest was somewhat disappointing due to nitrogen deficiency. The carrots and potatoes grew well, with high yields. Due to considerable competition from weeds, no clover was sown among the wheat and rye. However, after the harvest a leguminous green manure was sown. No green manure was sown after harvesting the carrots and squash because of the wet weather conditions in the autumn. It seems that the mineral content of the crops has diminished over the first three years of the rotation, and phosphate in particular. Additional, more detailed research into the underlying reasons for this reduction is recommended.



Looking ahead to 2015

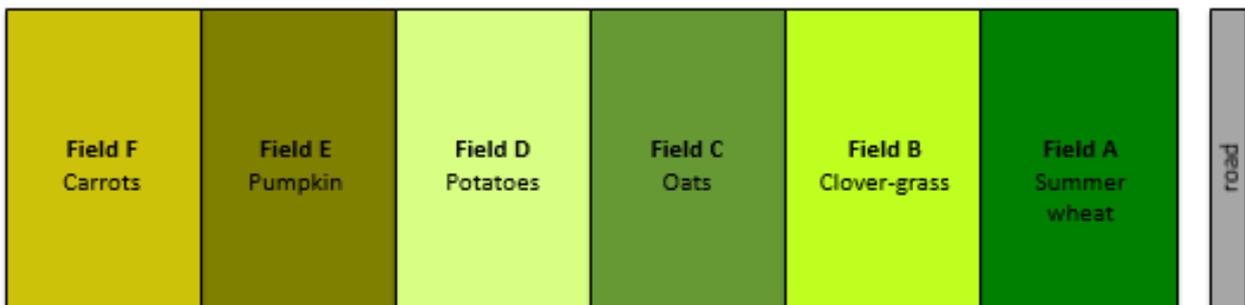
Wridzer Bakker (chairman of the Planty Organic working group) is looking forward to the 2015 season. Financing for the project has been secured. This means that we can set to work on a number of challenges. It's important to transform our experiences from the past few years into improvements. The key question that remains is whether there is sufficient nitrogen available.

We can consider the potato and carrot yields from last three seasons to be good. The squashes, which were planted instead of cauliflower, were also satisfactory. The problem we have encountered is the shortage of nitrogen (N), particularly in the cultivation of wheat sown in the spring. We are trying to solve this problem by sowing a mixed crop of broad beans and wheat in the spring. The idea is that the broad beans will bind nitrogen for the wheat.

Another interesting point this spring is the small proportion of clover in the clover-grass which was sown last autumn. We haven't yet found a reason for this. The very young marine clay soils in and around the Lauwersmeer are known for their good support of clover. The modest proportion of clover clearly has an influence on the nitrogen binding capacity of our purely organic recycling system. We also need look into the processing and decomposition of the clover-grass that was stored last summer. This coming summer the clover-grass will be stored wetter so that it will decompose better when it is spread the following spring.

We should also note that the phosphate (P) and Potassium (K) values in the most recent soil samples are significantly lower than at the start of our trials, which could indicate that P and K is being released from the soil. Enough challenges to guide the further crop development this season and to observe what is happening in a closed organic recycling system.

Crops test field 2015



SPNA open day

The Kollumerwaard trial farm in Munnekezijl is holding an open day on Tuesday 7 July 2015. The Dutch foundation for northern trial arable farms (Stichting Proefboerderijen Noordelijke Akkerbouw - SPNA) is organising the open day. The day will focus on the trials being conducted at the Kollumerwaard farm. Naturally, this will also feature Planty Organic. Keep an eye on the www.spna.nl website for further information. Everyone is welcome on 7 July!

Bio-beurs 2015 – Dutch organic trade fair

The Stichting Proefboerderijen Noordelijke Akkerbouw (SPNA) presented itself at the Dutch organic trade fair on 21 and 22 January 2015 at IJselhallen in Zwolle. We presented the Planty Organic results together with Biowad. Visitors appeared very interested in our work. Some critical questions were posed and many people indicated that they are curious about the results after 2017: is this system sustainable? The stand was in 'soil square' (Bodemplein), where other parties were also exhibiting. During these two days we were able to give information to many interested people.



Planty Organic in the media

Planty Organic received a great deal of media attention during the first quarter of 2015 (all in Dutch).

Bio Journaal [Bio news] (7 January 2015) Planty Organic results: 100% self-sufficient farming system
<http://www.biojournaal.nl/artikel/17808/Resultaten-Planty-Organic-100-procent-zelfvoorzienend-landbouwsysteem>

Nieuwe Oogst [New Harvest] (9 January 2015) Planty Organic Presentation at the Bio-Beurs
http://www.nieuweoogst.nu/scripts/edoris/edoris.dll?tem=LTO_TEXT_VIEW&doc_id=215773#.VRASNvmG8io

Bio Kennis [organic expertise] (12 February 2015) results of self-sufficient soil hopeful
http://www.biokennis.org/nl/biokennis/shownieuws/Resultaten-zelfvoorzienende-bodem-hoopvol.htm?utm_source=Measuremail&utm_medium=email&utm_campaign=Biokennis

Bio Journaal [Bio news] (26 March 2015) First results of self-sufficient soil hopeful
<http://www.biojournaal.nl/artikel/18364/Eerste-resultaten-zelfvoorzienende-bodem-zijn-hoopvol>

Beter Bodem Beheer [Better soil management] (27 March 2015) Results self-sufficient soil hopeful
http://www.beterbodembeheer.nl/nl/beterbodembeheer/show/Resultaten-zelfvoorzienende-bodem-hoopvol-1.htm?utm_source=Measuremail&utm_medium=email&utm_campaign=Beter+Bodembeheer

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