

Discussion: "We need reliability and flexibility!"

It is often difficult for winter wheat after later clearing crops: on wet soil, it may be necessary for the seeds to be "plastered" in, the wheat starts badly, excellent yields are not to be expected. Often, it is impossible to sow at all in late autumn due to the weather. This calls for flexible solutions: hands-on experts discuss the option alternative wheat.

Summary:

Position of the WeW® in the crop rotation: Friedrich Heins, Helmut Gockel and Martin Köchy sow alternative wheat on approx. 10-20 % of the wheat area after late clearing preceding crops, normally sugar beets, on the best soils.

Sowing time: The rule of thumb for alternative wheat at sowing time is: Never early - always late! WeW® gives a great deal of sowing flexibility - all participants in the discussion agree on this. If the conditions in autumn are too bad for tilling, with alternative wheat you can wait practically without restrictions.

Winter hardiness of late seeds: Even sowing in January has not resulted in problems for any of the discussion participants in the last decade (!). None of the WeW® varieties has ever seriously suffered from winter killing.

Harvesting dates of late seeding WeW®: Due to the extremely vigorous growth, WeW® generally catches up with the development deficit in comparison with the winter wheat sown in October, so that the harvest times are identical. The yield of alternative wheat is within the farm average. One main advantage of WeW® is its highly stable falling number and does not need to be harvested as soon as it is ripe - this also means flexible harvesting times.

Martin Köchy, Helmut Gockel and Friedrich Heins have already been planting WeW® alternative wheat for consumption and propagation for many years. In doing so, the alternative wheat is planted on 10-20 % of the wheat plots after late clearing crops, typically sugar beets. And that is exactly where this wheat speciality belongs. As WeW® alternative wheat is winter-hardy but does not require vernalisation, it can prove its advantages in many late to very late sowings from mid-October right into spring: greater yield and higher flexibility than winter wheat of comparable quality i.e. generally E-varieties. Here is the growing experience of three practical experts.

Where is WeW® in your crop rotation and on which soils?

Friedrich Heins: Alternative wheat is always planted after late sugar beets and therefore on the better soils.

Helmut Gockel: Alternative wheat is on the best soils as there the last sugar beets are harvested.

Martin Köchy: In normal years, with us it is also the best soils, but in 2015, we have made an exception for various reasons: it was the predominantly gravelly soils, the not quite so good plots in comparison. Looking back, this was not an optimal decision, as of all things this was the year with the long dry spell, which, unfortunately here also very quickly affected the yield.

Are there no problems with seeding in December/January in winters with more frost?

Gockel: Of course the plants have a development deficit in comparison to normally sown winter wheat. However, I have to say that in all those years, even in 2012, I have never ploughed alternative wheat plots or even considered doing so. All varieties grow so well, that development deficits are made up for until harvest, even when sown in February: through extreme vitality in spring, better tillering and faster growth.

Köchy: We have been cultivating alternative wheat for more than 30 years, every type of varieties there is. We have never had a hectare killed off by frost.

Heins: I can confirm the winter hardiness and the vigorous growth as well in principle. Some colleagues pursue the strategy, to plant early ripening winter wheat after late beets and after transporting the beets away alternative wheat in the headland. But in my experience, I can only advise against that: early winter wheat will not catch up with alternative wheat, with the exception of Naxos, no matter how vigorous the growth is. For winter wheat with normal or even late ripening, this procedure will work pretty well.

Does that mean that irrespective of the seeding time, the alternative wheat harvest time will fall into the "usual local" harvest time of winter wheat?

Köchy: That's right. The possibility to do this in periods of little work and the flexibility while sowing are the decisive advantages of alternative wheat. But it really will ripen at the same time as winter wheat.

But – and this is also important: in a pinch, alternative wheat can remain even after reaching threshing ripeness. It does not need to be harvested straight away as with winter wheat, where the first shower will drastically decrease the falling number. In an emergency, this gives several days of extra flexibility during harvest.

Gockel: We have never had a falling number problem either. **Heins:** And that although the alternative wheat often gets threshed last – because it has better lodging resistance than the average lodging resistant winter wheat. I very rarely have cases of lodging in alternative wheat.

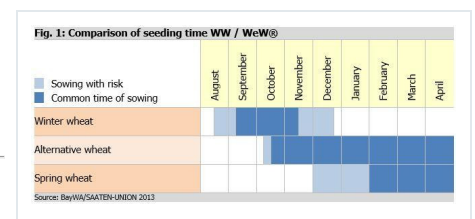
But surely there are differences in the falling number stability and in the lodging resistance between the varieties?

Gockel: Yes, sure. I like growing the now a little older variety Naxos. Naxos requires 10 % more growth regulator than the other varieties.

Köchy: Matthus offers normal lodging resistance, Granus and Lennox are considerably above average.

Topic seeding time/seeding amount: in your experience, which would be the optimal or maximum possible timeframe?

Köchy: The rule of thumb for alternative wheat at sowing time is: never early - always late! For us that means: never before 25.10, better considerably later. Even later, there



is practically no limit.

Heins: I try to have everything drilled before Christmas, as after that we often have longer periods of frost.

How are the yields: more like winter or like spring wheat?

Gockel: To compare yields on the farm, I also have to make note of the plot. Due to its early ripeness, I often use Naxos as a WeW® alternative wheat and this variety is a good 8 % over the average over a 5 year period. If I only look at the sugar beet wheat, there are still approx. 2 dt/ha extra yield. So, even if I phrase it very carefully: in comparison with late sugar beet wheat, WeW® is at least on the same yield level.

Heins: I can confirm this for the farm in Uehrden. Köchy: On average in the long term, these very late sown alternative wheat plots are not the highest yielders. But they guarantee very good yield reliability and good quality – and especially for very late sowing this is very important! The yield is comparable with late sown winter wheat for sowing times of between November and February. After this, the yield points more towards spring wheat.

How does alternative wheat fare in the official late seeding trials in your region, just as well as on your farms?

Gockel: During official trials, all varieties are treated equally: there are winners and losers. The standard treatment was good for the winners, and for the losers it wasn't. This year, alternative wheat was just below average in the official trials but this is only a result from one year. To form a final verdict, you have to look at the results of several years.

Heins: That's why I grow a variety for at least 2-3 years, even if the first year didn't go well. Only this way I can get to know it well and perform measures to fit the variety. If I then find that the variety does not fit, I take it out again.

You have firmly integrated alternative wheat in the crop rotation. On most farms however, it is only used in emergencies for very late sowing – why?

Gockel: I don't really know. You can't lose anything, in doubt, I win.

Köchy: The areas for late sowing on most farms are rarely more than 20 %, but these areas carry the highest growing risk. This risk can be reduced considerably with alternative wheat.

Heins: And in good years, the yield is no worse than with late drilled winter wheat. In bad years, I perform even better with these vigorously growing alternative wheats. If I have alternative wheat on these very late plots, at least I can sleep better.

Thank you for the discussion.

The discussion was lead by Dr Anke Boenisch

Estate profile Klostergut Uehrde
Tenant Friedrich Heins/Vahlberg
Growing area (ha): approx. 320 • Crops grown: winter wheat, sugar beets, winter barley, oil seed rape, asparagus, field peas • Plot index: 3.5 • Land quality index: 57–100 (average approx. 82) • Average rainfall/year: approx 580 mm

Estate profile Hansen-Hogrefe
Manager Martin Köchy/Ingeleben
Growing area (ha): approx. 360 • Crops grown: sugar beets, winter wheat, winter barley, winter rye, silage maize, field peas • Plot index: 2.2 • Land quality index: 58–100 (average approx. 88) • Average rainfall/year: 590 mm

Estate profile Gut Radau
Managing director Helmut Gockel/Bad Harzburg
Growing area (ha): approx. 670 • Crops grown: winter wheat, winter barley, sugar beets, oil seed rape • Plot index: 3.2 • Land quality index: 40–80 (average approx. 59) • Average rainfall/year: 658 mm

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