

Rye - growing experimental 2011/2012

The goal: To find out, how many m² are necessary, to have 300g bread or equivalent for one person/year.

The thesis: 100m²/person is sufficient to grow round about 90 Kgs claned rye. This amount is enough to have 300g bread/equivalent per day/one year.

I started in summer 2011 with four experimental areas in different altitudes near the alps.

One in Germany/Bad Grönenbach at about 400m NN

One in Upperaustria/Gosau at 700m NN

One in Upperaustria/Ternberg at 500m NN

One in Carinthia/Simonhöhe at 1200m NN

The areas at Bad Grönenbach, Ternberg and Gosau where not satisfying due to inadequate documentation from the participants.

The area in Carinthia was the only one, which was documented with necessary accuracy. Of course, we had problems with weather: long-lasting frost in February and subsequent drought in spring 2012.

We also had a problem with a deer: it made a nest in the middle of the field and ate all available ears around.

Expiration:

April/May 2011: Preparation of arable land. Three sectors with 100m².

First sector: Subsoiling and applying 5cm compost, mixed with 5% charcoal.

About a quarter of the area was additional mulched with sheep wool (about 10cm high)

Second sector: Subsoiling and applying 10cm sawdust, enriched with liquid fertilizer

About a quarter of the area was additional mulched with sheep wool (about 10cm high)

Third sector: Subsoiling and seed of white clover (analogous to Bonfils)

June 22, 2011: Seed sowing in seed trays (the early seed to give the plants the maximum energy from sun from solstice [summer] to solstice [winter]. The theory of Bonfils was: the more sun-energy at this time, the better rooting of the plants – the richer tillering, starting from the solstice in winter.

July 30, 2011: Planting campaign. Analogous to rice planting. The plants where applicated per hand at a distance of 50cm square.

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Late winter 2012: Long lasting frost in February. We had an average of -10°C to -20°C for 15 days. In spite of more than 50cm of snow, the frost was effective through, down to the soil.

Except the parts, which were mulched with sheep wool. This parts where unaffected from frost.

Spring 2012: Subsequent drought for weeks didn't impair that much as feared, but it did. The sheep wool did it's job as well: the soil below had a good humidity all the time.

August 17, 2012: Harvesting campaign. After 13 months growing, the rye was ready to be cutted. We did it with scythes – the traditional way of harvesting cereals. The whole stalks were bounded to tufts and placed to "straw-males", ripening another 10 days on the field.

October 2012: Threshing per hand, cleaning from awns and ergot.

Comparison of the three different areas:

The third sector (with white clover) was totally unsatisfying. Fazit: this method is not useful. Second and first sector where both approximately equal. The second sector a little less than the first sector.

The total earning was a bit more than 60Kgs totally cleaned rye from the first and second sector.

Conclusion of this first experimental season:

Weather is an unpredictable factor. Also deers and other “competitors”.

Considerations for better success: Probably bigger areas – or better – over long periods, collection of reserves. Against food-competitors: Fencing in.

Extrapolation:

If we look at the not impaired areas of both the sectors 1 and 2 (the parts, mulched with sheep wool), we can extrapolate up to a harvest of more than 120Kgs per 100m².

Rye - growing experimentals 2012/2013

I did some experimentals at different altitudes in Upperaustria. One was very very interesting: Bad Ischl (550m NN) 2012/2013, a small rural area, about 70m². Hand-sowing in September 15th. Degraded and stony soil. Harvest end of July 2013. The surprise was: In spite of bad land, the straw was about two meters high and the cereals harvested were mostly twice large as normal. Unfortunately, the harvest was only about 20Kgs/70m².

Rye - growing experimental 2014/2015

June 2014: Start of another experimental with rye. June, 22nd : Sowing in seed trays.
July, 28th – 31st: Seedlings with five foliages planted into a 100m² field, which was earlier used as a pasture for pigs (very well fertilized). Subsoiled, then mulched with cardboards.

Actually we are in progress with preparing the area. Until 31st of July, I think, we have finished the planting of the rye-seedlings.

Fotographs will be sent, if you want to have.