

Can you grow

In the cold, wet summer of 2012, over 150 Garden Organic members grew a small plot of wheat as part of our members' experiment scheme. Francis Rayns reports on how they got on.

Wheat is not normally considered a garden crop, although there are some enthusiasts who do grow it on a small scale every year. This experiment was run to support "Bake your lawn", part of the Real Bread Campaign. The aim was to raise awareness of wheat growing and to find out if our members considered wheat to be a worthwhile crop.

The conclusions

About half of the 58 people who sent in their results would grow wheat or another cereal again. Others would consider growing wheat as an ornamental plant but not as a food crop; the time involved in processing and the relatively low yields were the main factors that discouraged people. However, it was generally felt that the experiment was a valuable educational exercise to demonstrate where a staple food comes from and it was particularly enjoyed by many children who were involved.

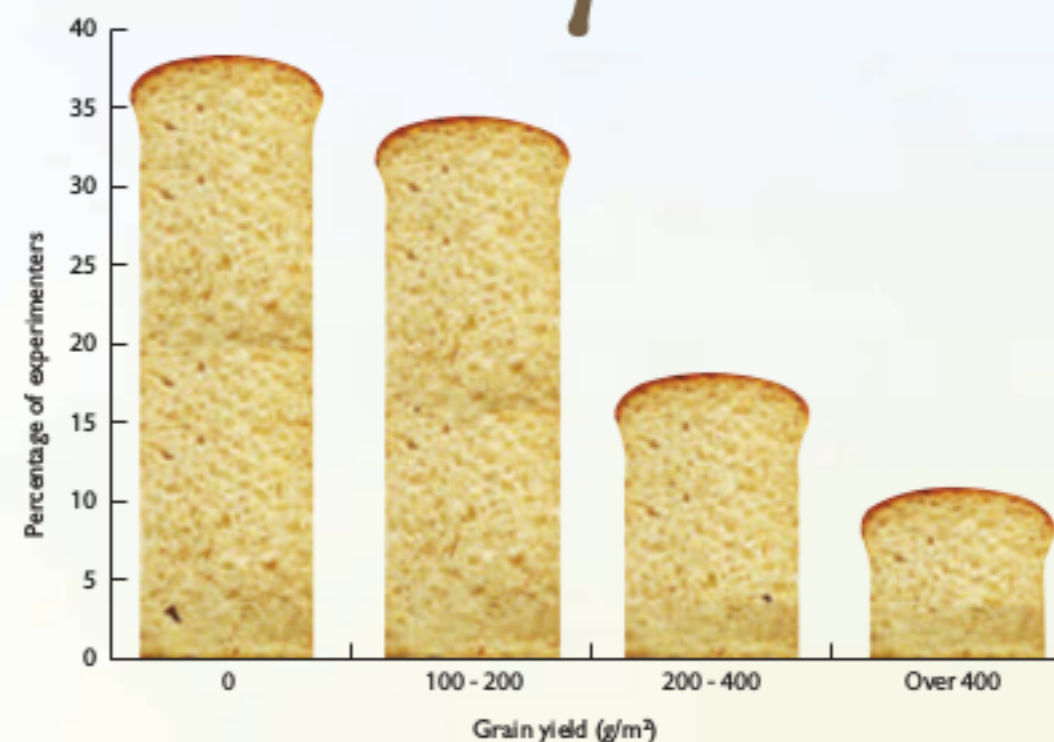
The experiment

We supplied 50g of 'Paragon' seeds, enough to sow a plot two metres square. This is a modern "spring" wheat variety with good bread making characteristics (high concentration of gluten in the grain). "Winter" wheat produces greater yields but spring wheat often performs well under organic conditions, as it avoids the virus-carrying aphids that are around in the autumn.

A total of 159 experimenters registered to take part; 58 (37%) returned results. Almost everyone sowed two square metres, as instructed, to give a seed rate comparable with commercial conditions. Sowing was between 18 March and 10 June – the latter date is very late for wheat. Many people had to delay sowing because the wet conditions meant they were unable to prepare the ground any sooner. Some also felt that the soil was still very cold.

The seeds emerged after an average of 12 days regardless of when they were sown. About half broadcast the seeds and half drilled them (sowed them in rows). Drilling proved the more successful method, as far as the final crop was concerned. A quarter of crops were protected with netting, fleece or a doche. Despite this protection, some crops were still eaten by mice, pigeons or other birds.

a loaf?



The cool, wet summer conditions tended to hamper crop growth, but nevertheless our experimenters gave it an average growth score of 3.5 on a scale of 1 (poor) to 5 (good). The most common score was 4. Little weeding was needed once a good stand was established. Most problems came late in the year as harvest approached – several crops were devastated by bird damage even when protected by netting and some were knocked down by the rain and rotted.

Processing problems

Processing the crop proved to be the most difficult stage. Various approaches were

tried for removing the seeds from the seed heads, ie threshing. Rubbing between the hands was the most common approach. Other more extreme methods were tried, such as hitting the ears with a steak-hammer on a tiled floor, knocking ears in a pillow case with a rolling pin, driving over with a car and floating off in water following a brief blast in a coffee grinder. Winnowing – separating the grain from the chaff – was almost always done by pouring the threshed grain from one container to another.

Almost everyone commented that threshing and winnowing was a time consuming operation. At this point, some

experimenters gave up and used the plants for display purposes or bird food.

How big was the crop?

The average reported grain yield was 161 g/m², including the 22 (38%) who had complete crop failure. There was, however, a very wide range, as shown in the graph. The highest yield was 1,000g/m². A typical yield of spring wheat for an organic farmer is 400g/m² (*Organic Farm Management Handbook*, published by the Organic Research Centre, Elm Farm). It is not surprising that careful nurturing on a small plot can achieve higher yields, as long as the birds don't eat it.

Sixteen (46%) of those who grew a successful crop used the grain for making bread or cakes and 7% ate it in some other form – in soups and stews, as sprouted seeds or as wheatgrass. Other uses included poultry feed, food for wildlife and for displays such as harvest celebrations. About a fifth had not yet used their grain by the time they returned their results, usually because they were still deciding how to grind it into flour.

Our thanks to all those who took part in this members' experiment. Although we would encourage others to try growing wheat, the seeds are difficult to obtain in small quantities. Often the best approach is to ask a local farmer, if you have one, for a few handfuls, and then to save your own.



Growing wheat



Just picked



Fresh loaves



Cereal

At Ryton Gardens, we also grew 'April Bearded' – a heritage wheat variety from the 19th century. It suffered less attack by birds; perhaps because the ears had awns, rather like barley, which made it harder for birds to perch and feed. Our experiment is a good illustration of how older varieties can be more productive in certain situations.