

Spring cereals always struggle to make an impact against their high achieving winter cousins. Triticale is no different. But four years' experience at the Osnabrück polytechnic in northern Germany suggests that spring triticale may well justify a role in situations where winter cereal yields are not exceptionally high and the rotation needs to be loosened up a little.

Spring triticale delivers a number of pleasant surprises. At the Nettehof research station it yielded 6.0 - 6.5t/hectare (2.4 - 2.6 t/acre) with protein levels ranging from twelve to as high as 14%. What's more, yields tend to be highly stable from year to year.

"I didn't expect yields to reach that level," says Herbert Pralle, director of the crop trials. He says spring triticale should not be seen as a low-input, low-potential crop. On a site with medium quality soils 120 kg N/ha was clearly too little.

"Up to 150 kilograms gave good yields and I think even 180 is feasible, but with an increased lodging risk," says Mr Pralle. Cycocel has proven effective at increasing crop strength.

Spring triticale is well suited to organic systems but, like



Four years' experience shows that growing spring triticale can pay, due to its high protein content and good yield stability, says Herbert Pralle.

SPRING TRITICALE: A NEW OPTION IN THE ROTATION

Research in northern Germany has discovered that there are many benefits from growing this little-known crop.

many minority crops, suffers from a limited range of registered crop protection products.

Fortunately disease pressure is low. A single spray with a fungicide at flag leaf was enough to eliminate mildew and septoria tritici. "A fungicide

treatment has not proved economic so far," says Herbert Pralle. "But we have continued to spray to reduce stress in the crop."

Fusarium ear blight, a problem for cereals in the area, has not affected spring triticale. A

relatively late flowering period reduces the risk of infection.

Establishment. Due to its frost hardiness, spring triticale can be drilled as early as February - normally at about 300 seeds per square metre. Later than mid-April it can be difficult to establish an adequate crop density.

The crop is usually ready to harvest at about the same time as winter wheat or a little later. During the 2004 harvest Herbert Pralle says some crops had difficulty drying out.

Of three varieties tested, Logo (bred by Hege) proved to have the highest yield potential. The Osnabrück scientist is hoping for a broader range of varieties, especially since spring triticale is particularly suitable for livestock farms, either to help spread the workload and reduce fusarium pressure or as a cheap source of homegrown protein.

The nutritive value of the grain is being investigated and it seems a favourable amino acid profile will provide further grounds to grow the crop.

Rainer Maché