



**In their effort to improve the taste and nutritional value of their bread, a group of French *paysans boulangers* (peasant bakers) are seeking out old varieties of wheat, many of which had not been planted for more than half a century. Experimenting with them, they are discovering that some have unexpected advantages, such as provoking a much lower level of gluten intolerance among consumers than industrialised bread.**

# Bread of Life

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**L**ike so many good things in life, it all happened because people began to think for themselves. In different parts of France, small groups of mainly organic wheat farmers have for many years been bucking the trend and continuing to produce good, nutritious bread, despite the growing dominance of the industrial bakeries.

Using old-fashioned millstones, they have been grinding the wheat they grow in their fields and, using natural yeast, they have been making their own bread, baking it in traditional ovens. The bread tastes good, so people in the neighbourhood have gone on buying, even when the mass-produced bread has been cheaper.

But recently the *paysans boulangers* (peasant bakers), as they are called, began to realise that modern varieties of wheat, which was all they

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## Touselle takes off

Henri is an organic farmer in the south of France. In 1997 he was carrying out research into farming practice in the Gare region when he discovered Touselle wheat. It is an early wheat, without whiskers, with a soft grain, very suitable for bread-making. It was once cultivated quite widely in Languedoc and Provence and was appreciated for its good yields, even when it was grown on poor soil in a difficult, dry environment. But by the time Henri became interested in it, it had been widely abandoned in favour of modern varieties.

Henri decided to try it out for himself and obtained a few seeds of four of the 13 varieties of Touselle held in the Department of Genetic Resources at INRA in Clermont-Ferrand. For the first two years, he cultivated the Touselle in his garden and then he decided to try it out in his fields. Gradually, he learnt more about it – how densely the seed had to be planted, how long it took to ripen, how resistant it was to heavy rain, and so on – and his experiments became well-known in the region.

Other farmers began to copy him, and by 2004 Touselle was being grown experimentally on a fairly large number of peasant farms in the south of France. In 2005 the Syndicat de Promotion de la Touselle was founded, with the idea of promoting the production of bread made from Touselle. Eager to back the initiative, consumers set up support groups. Henri then devoted an area of his farm to experiments with other varieties of Touselle brought in by other farmers. Together, they started crossing varieties and developing new strains. All the time Henri was recommending caution, saying that some of the varieties they were using had not been cultivated for many decades and would perhaps require special treatment.

could find on the seed market, didn't really suit their needs. For decades wheat has been bred by the seed companies to respond to the needs of the big wheat farmers and the big industrial bakeries. What these groups want is wheat that has a high yield and a high protein content, and that grows fast by capturing as much soluble nitrogen as possible from the chemical fertilisers added to the soil. But these are not the qualities that the peasant bakers want: they need varieties of wheat that are healthy and disease-resistant; that stand up to different kinds of weather; that are suitable for old-fashioned bread-making techniques; and, last but by no means least, produce tasty and nutritious bread.

### Seeking out the old varieties

It was in this way that peasant bakers, generally independently of each other, began to seek out the old varieties. It wasn't easy because these varieties have been neglected for well over half a century. The bakers had to find varieties that had last been widely grown in the early years of the 20th century or even in the 19th century. And there were other problems too. When farmers are looking for old varieties of fruit or vegetables, they can often find amateur gardeners who have conserved them down the decades. But people don't grow wheat in their back gardens. The peasant bakers had to seek out

the handful of old farmers who still had the ancient varieties, and look in the seed banks owned by INRA (National Institute of Agricultural Research) in Paris.

Moreover, finding the seeds was only part of the problem. Once they had located a few varieties, the peasant bakers had to breed from them. Some of the farmers simply multiplied the seeds, while others were more ambitious. They began developing the varieties so that they would be appropriate not only for different regions, climates and types of farming but also for the use that would be made of the wheat at the end. It is precisely this ability to choose and develop the old varieties for a wide range of applications that makes them so attractive to the peasant bakers, but it takes far more work to do this rather than to buy seeds directly from a big manufacturer. The bakers have been working for several years now and there is much more to be done.

### New networks

Yet another challenge has been the distribution network for the seeds, wheat and bread. It is evident that farmers who are producing wheat for the big firms, with their vast networks, will not want to plant traditional varieties, which have lower yields and lower protein content. Only a few peasant





*Sampling the wheat*

it clear that there is a huge potential for developing this market in the future.

The life blood of the new networks has been the exchange of seeds between peasant bakers from different parts of the country, but technically these transactions are illegal. In making an exchange (which in the regulations is classified as a sale), farmers should use seeds produced only from varieties that have been registered in the official catalogue of seeds and plants. But it is extremely expensive to register a variety in this catalogue (about €6,700, equivalent to US\$8,800), which puts it out of the reach of peasant farmers. In addition to the cost, the criteria for registration also pose a problem. These criteria were devised for industrial seeds and are completely inappropriate for traditional seeds, which do not maintain fixed characteristics but evolve over the years. It is precisely their capacity to adapt to changing circumstances that makes them so useful to the peasant farmers, but none of this has been taken into consideration by those drawing up the rules. So it seems that, just like old varieties of vegetables and fruit, traditional varieties of wheat seem set to remain unclassified and thus vulnerable to theft by the big corporations.

bakers will be interested in the seeds, and only a few specialised millers and some traditional bakers will want the wheat. So it has been necessary to build new networks, created around diversity and local needs. But the results are promising: the first networks, bringing together peasant bakers, consumers and the medical profession, have made

For a while, it seemed that a way might be found to resolve this impasse. After protests from many sectors of French society that the rigid regulations around registration represented a threat to the biodiversity of cultivated plants, a new guideline (Directive 98/95) was created by the European Commission in 1998 that allowed for the creation



## The dynamic collective of Tripolème

Since 2003 ASPAARI (the Support Association for Innovative Agricultural Projects and Rural Activities), which was one of the founding members of the Réseau Semences Paysannes, has been encouraging farmers to undertake a wide range of activities to conserve and multiply peasant seeds (wheat, barley, oats, buckwheat and others). The work has had the backing of researchers and doctors. Out of this cauldron of activities a new association, called Tripolème, has been born, which will promote the exchange of seeds and the production of peasant bread.

This new association brings together players from right across the spectrum – living links of solidarity between peasants, artisans, consumers, researchers and doctors. They are all anxious to exchange knowledge and resources in the areas of farming, biodiversity and health. The driving force behind the new organisation are five peasants: Florent Mercier, Nicolas Supiot, James Restoux, Vincent Chesneau and Bastien Moisan, each of whom has collected hundreds of peasant seeds. Tripolème organises visits to peasants' farms and arranges meetings where seeds and farming experiences can be exchanged. With its encouragement, about 20 peasants are multiplying old varieties of wheat so that soon they will be self-sufficient in seeds and able to produce flour and bread.

## Multiplying the Seed

Jean-François is a peasant baker who, for many years, used to cultivate two old varieties of wheat (Rouge de Bordeaux and Talisman), alongside several modern varieties. Little by little his interest in the old varieties has grown. He spent three years testing other old varieties, getting seeds from INRA and from old peasant farmers, and became more and more convinced of their excellent qualities. So finally he decided that he would put his energy into building his 'living collection' of old seeds.

Today he has:

- 80 varieties, sown in 4–10 metre lines (which he himself multiplied from a few seeds) in his back garden;
- 200 mini-plots (each 7 square metres), with 160 varieties, in a half-hectare plot;
- 15 varieties, multiplied separately, which he uses for experimental bread-making and to supply to 5 or 6 organic farmers in the region, on a 1-hectare plot. Some of the varieties, such as Bon Fermier, Richelle, Rallet, Blé du Lot and Bladette, date from the last century.

His idea is to multiply the use of these old varieties throughout the region by supplying seeds to organic farmers, who will test them on their own farms and then supply them to other farmers. He believes that the seeds can be improved by the farmers themselves, who will then be able to furnish a regular supply of good wheat to the peasant bakers. The work, he says, will take at least five years.

of a kind of annexe in which 'conservation varieties' would be listed. Unfortunately, the seed companies saw this as a loophole in the extremely concentrated and controlled seed system and began to lobby systematically against it. The Commission is still supposed to be drawing up a concrete definition of a 'conservation variety' but, as a consensus cannot be reached among the different parties, this work has been repeatedly postponed.

The French experience is still small-scale. In all, there are about 100 peasant bakers, working in different ways with traditional varieties (see boxes). Almost all of them have their own millstones, so they are able to sell flour or bread, but in Brittany some traditional millers have started to buy the traditional varieties, which means that poorer farmers, who don't have their own millstone, have been able to start growing the old varieties too. There is even talk of setting up small factories, though care must be taken not to get sucked up into harmful industrial processes.

Growing public demand is also a crucial part of the mix. People enjoy the taste of the bread and realise that it is better for their health. Although there has not yet been a proper scientific investigation, there is much anecdotal evidence that bread made from traditional varieties can be eaten without an allergic reaction from the growing number of people who suffer from gluten intolerance. No one knows why this is the case: is it something in the wheat itself? Or in the way it is cultivated? Or in the methods used to prepare the bread, without the addition of chemicals?

The peasant bakers themselves are cautious, fearful that their bread could become the latest passing health fad. Even so, if the claim is scientifically substantiated, it will be further evidence of the harm that industrialised bread is doing to the population's health and of the benefits that come from the natural product. But that is something that the baker-farmers – and those who eat their bread – already know in their bones.

