



## Winter Organic Cereals 2017: Diversity in the field - the way forward?

*On November 23rd fifty farmers, millers, bakers, researchers and more gathered at Casterley Barn on Rushall Farm near Pewsey, Wiltshire, for our first (and hopefully annual) 'Winter Organic Cereals' event. The theme of the day was to discuss cereal diversification in the field and beyond, which fit in well with the location as Rushall have been undersowing and growing spelt for years. ORC Crops and Breeding Researcher Charlotte Bickler reports on the outcomes of the day.*

The Wookey family have been farming organically since the 1970s. We enjoyed learning more about the farm, and its history, from Joe during the morning introductions. This was followed by a session on mixed cropping or 'plant teams', such as intercropping. Then in the afternoon we explored emerging opportunities in alternative cereal markets from field to fork. It was great to have a mix of people from across the supply chain present to share their perspectives, insights and thoughts whilst also creating links with each other.

### Intercropping: good, bad or indifferent?

In the morning workshop, the main aim was for delegates to share their experiences of intercropping and consider what direction they think research in this area should take. This is part of the DIVERSify (Designing Innovative Plant Teams for Ecosystem Resilience and Agricultural Sustainability) project which aims to increase the diversity of crop systems by identifying and optimising successful 'plant teams' that work well, and reliably, together under known conditions. Similar workshops are being held by thirteen partner institutions from Sweden to Kenya to ensure a range of farming systems and environments are considered.

There were some recurring themes in our group discussions including:

- Identifying crop combinations that work on individual farms and whether there is room for 'prescription';
- The loss of availability and knowledge of varieties that work well in intercropped systems;
- Restrictions within the market which limit the incentive to produce mixed products;
- Lack of capacity to process such products.

By working together, we began to unpick these barriers and explore potential solutions. Bringing people together to discuss their experiences felt like a positive step forward in encouraging the uptake of mixed cropping systems, which hold such potential for farmers, producers and the environment.



*Group discussions on experiences of intercropping*

The detailed discussion had built up everyone's appetite and all guests enjoyed their lunch (thanks Rachel and team!). Following lunch, groups were trucked down to Rushall's 5,000 tonne organic grain store, which can dry and clean not only their own grain, but grains for other organic farmers, too, and process alternative cereals, such as spelt. Delegates could also see the colour



*Touring the grain store with Joe Wookey*

sorter in action removing contaminants. There were also a lot of questions about the System Cameleon which has recently been brought on farm. Tweaks have had to be made to the technology to cope with the undulating Wiltshire downs which hadn't been appreciated at first.

### Want to get involved?

There is funding available as part of the project to cushion the risk for farmers who want to experiment or demonstrate 'plant teams' in their own fields. Farmers can submit applications to trial their own mixtures; comparing these to a nearby monoculture and collecting basic crop performance data. Farmers can also apply to demonstrate their own mixtures to peers through on-site demonstration days.

Farmers participating in the project will be asked to devote a suggested minimum area of 2,000m<sup>2</sup> to their plant team. This area could be a stand-alone plot or a strip within an existing crop. Once the plots are established, the farmers will be able to work with a DIVERSify 'science buddy' to collect basic data.

It is anticipated that farmers will receive funding up to 1,000 Euros each, although applications for support above this figure are welcomed where they are justified, e.g. if both data collection and on-farm demonstration are offered.

Please see <https://www.plant-teams.eu/> (the application form is available under 'links & resources'), or contact: [diversify@organicresearchcentre.com](mailto:diversify@organicresearchcentre.com).

We have also created an **Innovative Farmers** group to support this process called "Intercropping in Arable Systems". We will be meeting on January 30th at Elm Farm to develop your ideas for on-farm trials. Please let Charlotte Bickler [charlotte.b@organicresearch.com](mailto:charlotte.b@organicresearch.com) know if you are interested in attending.



## Alternative cereal systems

After the tours, the afternoon session was based around the CERERE (Cereal Renaissance in Rural Europe) project which was introduced by Giuseppe Nocella from the University of Reading. The project aims to promote the use of local and heritage varieties of cereals and alternative grains, such as einkorn and emmer. It studies their health attributes and quality alongside successful examples of production and processing in alternative cereal supply chains incorporating local knowledge and traditions. Two parallel sessions were run: one focusing on supply chain models and marketing; and the other focusing on baking and eating diverse cereals. Andrew Trump kicked off the former, giving an overview of the work of Organic Arable and some interesting examples where alternative grains have been embedded in the market via the development of innovative supply chain models. For example, working with



*Giuseppe Nocella introduces CERERE*



*Rupert Dunn*

Whites Oats, focusing on quality and transparency in pricing has created a sustainable and increasing market for organic oats. He was followed by Rupert Dunn (Torth y Tir), who gave an overview of his experiences and the challenges of entering the market as a social enterprise focusing on short supply chains growing, milling and baking heritage wheats in Pembrokeshire.

In the other session, Michael Marriage (Doves Farm) gave an introduction to growing and processing alternative cereals. This was followed by Dr Paola Tosi (Reading University) introducing her research on the composition, processing and nutritional aspects of these grains.

Aside from the organised sessions, we really enjoyed the opportunity to meet and discuss ideas with so many people that we have worked with for some time or hope to work with in the future. There are many opportunities for cereal diversification in the field and beyond, and we are keen to continue to push forward research and innovation in this stimulating area.



*Diversity in the field? Introductions at Winter Organic Cereals*



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## ORC's amazing adventures in India

*Nic Lampkin, Konstantinos Zaralis and Anja Vieweger battled the smog to attend the 19th IFOAM Organic World Congress in Delhi, India, from the 7th - 11th November.*

First we took part in the very successful and interesting pre-conferences, including: Technology Innovation Platform (TIPI Organics); Accelerating Innovation - The Role of Science, Policy and Practice; Organic Animal Husbandry - Role of Livestock in Sustainable Agriculture; and Food Systems 3.0. Then the main IFOAM - Organics International conference started - full of innovative and inspiring talks from farmers and scientists from around the world.

In the scientific track, Anja Vieweger presented the latest outcomes of our work on farmers' own principles of health and their interpretation and translation of the IFOAM principle of health into practice (Health Networks project, Ekhaga Foundation Sweden). Konstantinos Zaralis spoke about our project on participatory approaches to identifying, developing and field testing innovations to improve UK agroforestry systems (Agforward, EU-H2020).

In parallel to the main conference, the seed festival celebrated crop genetic diversity and showcased an amazing display of regional and national varieties and crop species. The colourful collections attracted a large and diverse audience from local farmers to international scientists.

The week was packed with amazing adventures, ranging from Nic's first drive in a tuk tuk (in heavy smog, at night without lights and against traffic of course), hearing about over 120 different rice varieties, enjoying delicious food all week, re-connecting with old friends and building new relationships for future collaboration, to accepting that 40-miles bus journeys may easily take over 4 hours and that the organic sector has much to look out for from Asia in the future!

