Organic mushroom production

Producing organic mushrooms is somewhat different to producing organic crops and livestock, though the basic philosophy and principles are the same.

Many familiar, normal mushroom production practices are employed, which are then guided and controlled by approved organic standards.

Organic standards have been developed to provide producers with clear rules as to how organic food should be produced to meet consumers' demands.

Organic certification and conversion

EU organic legislation and certification

An EU Regulation (2092/91 and its supplements) controls the production of organic food within the EU, as well as the importation of organic food from outside the EU.

Food sold as organic anywhere in the EU must be certified as produced under an approved organic standard. Producers, processors and packers must all be registered with the EU as organic operators. This certification is the consumers' guarantee that food has been produced to an approved organic standard. However, it does not give any guarantee as to, for example, freedom from pesticide residues, nutritional value or any other 'quality'.

National standards

Each EU member state has an obligation under the EU Organic Regulation to ensure that organic food produced in its jurisdiction meets at least the EU baseline standard.

In the UK the Advisory Committee on Organic Standards (ACOS) implements the baseline standard for the UK.

Member states also approve independent certification bodies and their standards as meeting National and hence EU organic standards.

The information in this leaflet is based on the UK National standard for organic mushroom production. This is identical to the EU standard for organic mushrooms.

Independent organic standards

The standards adopted by the independent certification bodies all meet National standards. However, any particular set of independent standards may have its own additional requirements over and above National standards.

It is therefore very important to choose a set of standards that meets your needs.

Changes in EU organic legislation and standards

EU organic legislation is continually evolving, resulting in the on-going adaption of National and independent organic standards so that they maintain their own approved status. Operators themselves also have to implement any changes.

Organic Certification Bodies

Within the UK approved certification bodies carry out certification of producers, processors and packers of organic food. Certification involves the issuing of an annual licence to sell organic food. A number of UK approved organic sector bodies currently register producers in Northern Ireland:

• Soil Association Certification Ltd, South Plaza, Marlborough Street, Bristol, BS1 3NX

- Organic Farmers and Growers Ltd, Elim Centre, Lancaster Road, Shrewsbury, SY1 3LE. Tel: 01743 440512
- Irish Organic Farmers and Growers Association, Harbour Buildings, Harbour Road, Kilbeggan, Co Westmeath. Tel. 00 353 506 32563
- Organic Trust Ltd, Vernon House, 2 Vernon Avenue, Clontarf, Dublin 3. Tel: 00 353 1 853 0271
- **Bio-Dynamic Agricultural Association**, The Painswick Inn Project, Gloucester Street, Stroud, Gloucester, GL5 1QG. Tel: 01453 759501
- Organic Food Federation, 31 Turbine Way, EcoTech Business Park, Swaffham, Norfolk, PE37 7XD. Tel: 01760 720 444

Inspection

In order to become a registered organic producer or processor, a unit must undergo an initial inspection based on previously submitted information and records, plus a detailed organic conversion plan.

Then, once initial certification and license have been granted, an annual inspection is carried out to renew the license.

Independent certification bodies and National bodies also reserve the right to carry out ad-hoc inspections during the year.

Certification costs

Organic registration and certification require a licence fee to be paid, and sector bodies differ somewhat in their fees and fee structures.

On Northern Ireland units, experience to-date has shown that organic certification costs range from around £200 to over £500 per year depending on a number of factors, the most important usually being the size of the unit.

Converting to Organic Production

Converting to organic production is a major decision for any farmer or grower, often involving changes to unit structure, management and finance. It is therefore important that careful consideration is given to the process of conversion, and how it is undertaken.

Unlike land-based organic production, organic mushroom production can begin after a non-organic crop, following suitable cleaning of the house and organic registration.

A very important part of converting a unit to full organic status is a realistic conversion plan which allows conversion to proceed as rapidly as practicable.

A sound conversion plan will :

- Produce a practical, balanced organic system
- Minimise financial pressures during conversion
- Steadily build producer confidence

Planning

Planning both your intended organic production system, and the conversion route for achieving it, is an integral part of your application for organic registration. The sector body you register with will want to see that:

- The unit will be practical and viable
- It will meet their organic standards

Keeping records

Keeping clear, up-to-date records of **all** operations, inputs, and financial transactions will assist both your management of the unit and will allow your inspector to get a clear picture of how your unit is running. **Without good records you will soon run into certification difficulties.**

Records of non-organic production may also have to be made available.

You are strongly advised to have a comprehensive recording system in place, and operating, by your first inspection.

Advice

If you are considering converting to organic production then taking sound advice is highly recommended. Unless you already have considerable knowledge of organic production systems, organic standards and procedures, assistance to help you make the correct decisions and fill in application forms is invaluable.

Greenmount Campus has a team of organic development advisers who can assist you, and contact details are given at the end of this leaflet.

Prior to conversion, it is also a good idea to talk to, and visit, other organic producers, particularly those with a similar unit size and structure to your intended organic unit.

Marketing

You should develop your marketing strategy very early on in the conversion process, so that by the time you have received full symbol status, you have a market for your produce.

Registration procedure and time-scale

From the time of considering 'going organic' to receiving confirmation of organic registration will probably take several months. Below is a typical sequence.

- 1. Obtain information about organic production and marketing, and visit organic producers
- 2. Discuss your ideas with an organic adviser and take basic decisions
- 3. Obtain a set of standards and application forms
- 4. Obtain all necessary documentation for completing the application
- 5. Plan the organic unit and its operation
- 6. Fill in and submit application forms to sector body
- 7. Receive inspection date or a request for further information
- 8. First annual inspection
- 9. Inspectors report laid before certification committee
- 10.Receive registration certificate / first years licence and / or a compliance notice

Application for certification

Whilst the application forms appear very simple, there are dangers of not giving sufficient information to allow registration to proceed.

Working with an experienced adviser will generally avoid delays caused by this as they will know what information is required to ensure the application goes smoothly.

First inspection

Some weeks after submitting your application, you will be given a date for your first inspection. You will also be told what information will be required at the time of the inspection. Inspection should not be a daunting process, and you should learn much from the inspector.

Compliance notices

Compliance notices are sent where there are issues which have to be complied with, resolved and/or agreed (in writing) before an organic licence can be issued. This can occur after first inspection, following annual inspection, where derogations or special permission has been requested, and when changes to the organic system have been notified to the certification body.

Compliance notices often take new producers aback, but they are issued solely to ensure that organic standards will be fully met.

Organic production

Modern organic production

Organic production is not simply a return to 'the old days'. Rather, it encompasses:

- Top quality husbandry and management
- Use of modern machinery and equipment
- Appropriate modern technology
- Dedication and skill

Environmental conservation

Organic mushroom standards pay high regard to protection of the environment, in particular, prevention of pollution.

Pest and disease control

There are very few pesticides, available to organic producers generally, and those that are allowed require positive proof of need, and prior permission, before they can be used.

Alternative means of controlling pests and diseases are utilised based initially on a very high level of hygiene in the house and care in sourcing materials.

Other pest control techniques include:

- Physical barriers
- Biological control agents

Currently, no chemical pesticides are allowed in organic mushroom production

Hygiene, cleansing and disinfection

Organic producers have to meet organic standards for hygiene, cleansing and disinfection. A restricted range of cleansing and disinfection products is allowed, and this may vary with different certification bodies.

Currently, steam is the recommended means of cleaning and disinfection in organic mushroom production, though a number of chemical products may be allowed in empty mushroom houses after obtaining prior permission.

Additional restrictions

Whilst organic standards set the rules for organic certification, it is each producer's responsibility to know, in addition, what products their marketing body and the ultimate retailer of their mushrooms may or may not allow.

Organic spawn

There is currently no requirement to use organic mushroom spawn, though the source must be approved. However, it is possible that organic spawn will have to be used sometime in the future.

Organic & non-organic production on the same unit

Growing the same type of mushroom organically and non-organically at the same time on the unit is prohibited, and switching between organic and non-organic production is not normally allowed.

Organic compost

The mushroom compost used should ideally be produced from fully organic materials. If this is *proven* to be unobtainable, 25 percent of the total weight of the components (excluding the casing and water) can come from non-organic sources providing the sources have been approved and meet requirements, including freedom from genetic modification and the welfare of livestock producing manure.

However, all additional straw used in the manufacture of the mushroom compost must be organic.

Packing, storage, transport, packaging and labelling

Packing, storage, transport, packaging and labelling all have their own organic standards.

Disposal of spent compost

Organic mushroom compost is a valuable resource, and should normally go to an organic farm where it can be used as a source of nutrients.

Contacts for further information

Organic production

Adrian Saunders Greenmount Campus, College of Agriculture, Food and Rural Enterprise Antrim, BT41 4PU tel: 028 9442 6765 mobile: 07887 708807 email: adrian.saunders@dardni.gov.uk

Mushroom production Cathal Ellis Greenmount Campus, College of Agriculture, Food and Rural Enterprise Antrim, BT41 4PU tel: 028 9442 6793 mobile: 07713 584250 email: cathal.ellis@dardni.gov.uk