

Soil-less in Scandinavia undermines EU Organic credibility

Regulation rules out soil-less cropping but no EU action yet..

Reports of soil-less production in organic glasshouses in Scandinavia and the EU's seemingly tolerant position have raised a number of questions. The new EU Regulation on organic production (834/2007) shows a number of clear references to the fact that plants must be raised in soil and that soil properties and biodiversity should be preserved and enhanced. Definitions of soil all state in more or less detail that it is part of or attached to the surface of the Earth. Once these facts are reviewed the only logical conclusion is that soil-less cannot and should not be allowed in organic systems. This is also important in the maintenance of consumer confidence and harmonised perceptions across the EU. The failure of member states and the EU Commission to stop this practice may damage the credibility of the regulatory process.

The recently reported story that several Scandinavian countries are allowing organic production without soil is causing consternation amongst long standing organic farmers and growers. But the news that the EU Commission, far from outlawing the practice, seems to be prepared to consider it as being compatible with the regulation is raising questions about the credibility of the whole organic regulatory process in the EU.

Can it be that the regulation allows production in a soil less medium? What do the Organic Regulations actually say? Isn't soil health the universal theme of organic farming and one that consumers of organic food would recognise and expect?

Before looking at what the regulations have to say, it is probably worth having a brief look at the 'new look' regulatory landscape. EU Regulation 2092/91 has served as the mainstay of the organic standards for some 17 years. Still somewhat incomplete and much amended it was repealed on 31st December 2008. In its place we now have 834/2007 (the regulation of principle) and 889/2008 (the regulation of practice) or to put it another way the over-arching principles and the implementing rules respectively. Many of the implementing rules have been transferred from 2092/91 without change but the clear setting out of general and specific principles is new.

There are a number of 'recitals' at the start of 834/2007 that essentially summarise the purpose and objectives of the regulation. Recital (5) says "It is therefore appropriate to define more explicitly the objectives, principles and rules applicable to organic production, in order to contribute to transparency and consumer confidence as well as to a harmonised perception of the concept of organic production." No mention of soil here but a commitment to more precise definitions and a reference to harmonised perception. This means that there should be a common understanding of the principles and practice of organic production right across the EU.

Recital (12) is more explicit about soil: "Organic plant production should contribute to maintaining and enhancing soil fertility as well as to preventing soil erosion. Plants should preferably be fed through the soil eco-system and not through soluble fertilisers added to the soil." This is reinforced in Article 5 **Specific principles applicable to farming**. "In addition to the overall principles set out in Article 4, organic farming shall be based on the following specific principles: (a) the maintenance and enhancement of soil life and natural soil fertility, soil stability and soil biodiversity preventing and combating soil compaction and soil erosion, and the nourishing of plants primarily through the soil eco-system." There are further clear references in Article 12 (a) and (b), and it is difficult to draw any conclusion other than organic plants and crops should be grown in soil.

Is there any leeway in the definition of soil that might allow the use of substrates? The use of the term 'potting soil' is used but it actually describes a 'potting compost or substrate'. There are a number of definitions that can be found and many are quite long-winded but according to the Free-Online Dictionary soil is "the top layer of the earth's surface, consisting of rocks and mineral particles mixed with organic matter". This does not tell the whole story but along with all other definitions it makes explicit reference to the earth's surface and the fact that this is where soil is found.

A more authoritative definition comes from the Soil Science Glossary of the Soil Science Society of America. Soil is "The unconsolidated mineral or organic material on the immediate surface of the earth that (a) serves as a natural medium for the growth of land plants; (b) has been subjected to and shows effects of genetic and environmental

factors of climate (including water and temperature effects), and macro- and microorganisms, conditioned by relief, acting on parent material over a period of time.....” This definition is quite clear – soil is part of the earth’s surface, its creation involves a number of climatic, biotic and environmental factors, and it takes time.

It is hard to see how it is possible to interpret the organic regulations in a way that allows cultivation of crops in a demarcated container or bed using a mix of materials that bears little or no resemblance to the definitions of soil set out above. This has implications for the glasshouse production methods apparently in use in Scandinavia and it also has considerable implications for the production of herbs in pots for direct consumption.

Any objective assessment of the facts must conclude that neither of these production methods should be allowed in organic systems, a view that would be consistent with the desire for harmonised perceptions across the EU.

So why are the Scandinavian countries allowing them? Why are the Commission not acting to implement their own regulation? Why is Defra not raising this issue?

We would love to hear the answers and to have your views.