Rapidly growing Annexes? EGTOPs role in assessing new and existing inputs in organic growing. What is the scientific basis for Annex changes

Frank Oudshoorn, senior advisor Organic Innovation, Danish agriculture and food council, SEGES.

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Fokhol farm, Stange Monday, October 28, 2019
Who am I?

Frank Oudshoorn, Specialkonsulent økologi-innovation.
   senior advisor with special competence in climate assessment,
   sustainability (nutrients, biodiversity).

Background: arable crop advisor in the field, organic crop advisor, manager of organic research station, Wageningen/Aarhus; 2005-2009:Phd in system analysis of new technology for organic farming, researcher and lecturer at Aarhus University, and now since 2017, SEGES.

Member of EGTOP permanent group since 2018 (Expert Group for Technical advice on Organic Production, appointed by the European commission).

Topics of work at the time
   Climate accounting on-farm, sustainability assessment using RISE, Øko-tek (on using new technology for organic farming), Organic Plus (WP impact, soil, systems)
Outline

Something about me and the topics I am working on.

What is EGTOP and how does it work

Examples of decisions made, in the past and in my time.
  
  Digestate (and co-digested with animal by-products)
  
  Struvite
  
  Biochar
  
  Stripped Nitrogen
Ekspert Group for Technical Advice on Organic Production

Permanent group of 12 persons with different expertise

Subgroups for expert advice with different participation, dependent on topic.


It aims to provide advice to the Commission concerning the authorisation of the use of products, substances and techniques in organic farming and processing, to develop or improve organic production rules and, more in general, on any other matter relating to the area of organic production.
Permanent members EGTOP

BESTE Andrea
BLANCO PENEDO María Isabel
BOURIN Marie
CENSKOWSKY Udo
LEMBO Giuseppe
MARCHAND Patrice
MICHELONI Cristina
MINGUITO Pablo
OUDSHOORN Frank Willem
QUINTANA FERNÁNDEZ Paula
SOSSIDOU Evangelia
VOGT-KAUTE Werner

https://eur-lex.europa.eu/legal-content/DA/TXT/PDF/?uri=CELEX:32017D0831(01)&from=EN
On basis of EU regulation EC no 889/2008

We look at annexes, what is allowed.
My expertise is especially on Annex I


B: the restriction of the use of external inputs. Where external inputs are required or the appropriate management practices and methods referred to in paragraph (a) do not exist, these shall be limited to:

(i) inputs from organic production;

(ii) natural or naturally-derived substances;

(iii) low solubility mineral fertilisers;
When evaluating

We take in consideration:


11) Organic farming should primarily rely on renewable resources within locally organised agricultural systems. In order to minimise the use of non-renewable resources, wastes and by-products of plant and animal origin should be recycled to return nutrients to the land.

12) 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.
Procedure after: ???

Political decision?

Dependent on new council regulation being negotiated at the moment, by national delegates representing national interests or organic farming (or both)
First a dossier

Annex 1: Template for dossiers concerning fertilizers and soil conditioners

Part A

DOSSIER CONCERNING THE REQUEST TO AMEND ANNEX I
Fertilizers, soil conditioners and nutrients referred to in Article 3(1) and Article 6d(2) of Commission Regulation (EC) No 889/2008
Dossier

"Where a Member State considers that a product or substance should be added to, or withdrawn from the list referred to in paragraph 1, or that the specifications of use mentioned in subparagraph (a) should be amended, the Member State shall ensure that a dossier giving the reasons for the inclusion, withdrawal or amendments is sent officially to the Commission and to the Member States."

General
Identification
Characterisation, composition, relevant nutrients, physical properties, solubility, origin of raw materials
Specification of use, fertilizer or soil conditioner, application, dosage
Status, historic use, regulatory status (EU, national, others)
Reasons for inclusion/withdrawal/amendments
Consistency with objectives and principles of organic farming
Other aspects
  environmental
  animal health
  human health
  food quality and authenticity
  ethical issues
  socio economic issues
  various aspects
EGTOP receives

We receive mandates which are compiled dossiers, organized by topic.

Sub-groups are formed

Permanent group evaluates the sub group reports

Thereafter sent to commission.
**Digestate**

Biogas digestate containing animal by-products co-digested with material of plant or animal origin as listed in this Annex:

- Composted or fermented mixture of vegetable matter
- Composted or fermented mixture of household waste

**Conclusion from Fertilizer report I, 2011:**

Animal by-products (including by-products of wild animals) of category 3 and digestive tract content of category 2 (categories 2 and 3 as defined in Regulation (EC) No 1069/2009 of the European Parliament and of the Council) must not be from factory farming origin. The Processes have to be in accordance with Commission Regulation (EU) No 142/2011. Not to be applied to edible parts of the crop.

However, some national authorities do not admit the use of slaughter waste etc. (DK)
**Struvite**

A crystallization product from sewage waste water cleaning process

\[(\text{MgNH}_4\text{PO}_4\cdot6\text{H}_2\text{O})\text{ 28}\% \text{ P}_2\text{O}_5 (= 12\%\text{P}), 16,7\% \text{MgO}, 5\% \text{N}.\]

Can be used as slowly releasing P fertilizer, P is needed

Recycled product

Doubt about contaminants, mineral N,

**Conclusions**

Cannot be included in Annex I because it is not authorized under Regulation (EC) No 2003/2003. However the group (EGTOP) concluded struvite should be considered to be in line with the organic principles, and as soon as it is allowed under 2003/2003 recommends its inclusion, provided ensureness for hygienic and pollutant safety.
Biochar

A pyrolysis product; two major dominants, charcoal; used as fuel

Biochar; applied to soil or feed additive for animals

Problems with different interpretations from member states:

• Some member states consider that biochar is not mentioned in Annex I and therefore prohibited.
• At least one authority considers (or at least has done so in the past) that biochar is equivalent to wood ash, and therefore authorized.
• Some member states consider that biochar is acceptable for organic farming, but that only commercial products which are approved under general legislation may be used.
• Switzerland has included biochar in the Annex of fertilizers authorized in organic production. There is an explicit restriction that only commercial products which are approved under general legislation may be used.
Other reflections

Polycyclic Aromatic Hydrocarbons (PAH’s)

Climate effect ? Competition on biomass.

Source

Alternatives ?

Conclusions: The group doesn’t see the necessity of biochar use in organic farming, but cannot find strong evidence against the application in the soil, if contaminants risks are handled
Stripped Nitrogen

Filtering of ammonia from barn ventilation, and catching nitrate in soluble form.

In report Fertilizer III Report the application of such fertilizers, although in line with the recycling principle, was denied, mainly because it conflicts with the principle of not using mineral fertilizer.