

ADVISORY COMMITTEE ON ANIMAL FEEDINGSTUFFS

48th Meeting of ACAF on 3 December 2009

Discussion Paper

Some recent developments concerning mycotoxins in animal feed

Action

The Committee is invited to:

- **endorse the line that the controls contained in Commission Recommendation 2006/100/EC for the mycotoxins OA, ZON, DON and fumonisin B1 + B2 should be retained; and**
- **consider the recent adoption of ‘mycotoxin binders’ as a new functional group of feed additives, and to state whether it would like information on the types of mycotoxin binder products on the market, and what data there are that show that they are efficacious.**

Secretariat: November 2009

Recent developments concerning mycotoxins in animal feed

Purpose

1. This paper provides information about the presence of mycotoxins in feed. In addition, the Committee is asked to:
 - endorse the line that the controls contained in Commission Recommendation 2006/100/EC for the mycotoxins OA, ZON, DON and fumonisin B1 + B2 should be retained; and
 - consider the recent adoption of ‘mycotoxin binders’ as a new functional group of feed additives, and to state whether it would like information on the types of mycotoxin binder products on the market, and what data there are that show that they are efficacious.
2. Dr Ray Smith (Animal Feed Branch of the Food Standards Agency) will give a brief powerpoint presentation (see slides at Annex I).

Background

3. Mycotoxins are toxic substances produced by certain fungi or moulds. The presence of these substances in animal feed has the potential to cause harm to the consumer of animal produce and/or to the animals that consume the feed. The Committee received a presentation on feed mycotoxins in 2005 (ACAF/05/06) – see Annex II.

Current controls for mycotoxins in feed

4. Aflatoxin B1 (AFB1) has maximum contents, i.e. statutory maximum permitted levels, set for both feed materials and compound feeds under EC Directive 2002/32. The limits were revised in October 2003 via Commission Directive 2003/100/EC following advice from the European Food Safety Authority (EFSA). These controls were adopted primarily to help manage the risk to the consumer.
5. Ochratoxin A (OA), zearalenone (ZON), deoxynivalenol (DON), and fumonins B1 + B2 have guidance values for feed set under Commission Regulation 2006/576/EC. The guidance values are not statutory limits, but serve as a guide as to the levels in feed that can be tolerated by certain animal species. The values were put in place following advice from EFSA. The European Commission and Member States endorsed the view of EFSA that the presence of these mycotoxins in feed posed more of a risk to animal welfare, than to consumer safety. Thus, the setting of guidance values for these particular feed mycotoxins was considered to be the most proportionate approach.

Revised controls for feed mycotoxins

6. Recital (7) of Commission Recommendation 2006/100/EC states that ‘an assessment of the approach provided for by this Recommendation should be undertaken by 2009, in particular to assess its contribution towards protecting animal health’. The Member States and Commission have recently started such an assessment. The United Kingdom delegation to the Standing Committee on Food and Animal Health (Animal Nutrition Section) has not yet indicated its preferred course of action in this regard. However, it is the view of both the Food Standards Agency and of Defra that the current approach using guidance values to help control OA, ZON, DON and fumonisin B1 + B2 has been successful, and has not added significantly to the regulatory burden. The Committee is therefore requested to endorse the line that the controls contained in Commission Recommendation 2006/100/EC should remain in place.

Future developments

7. There are, of course, other feed mycotoxins that do not have specific controls. The Agency’s Animal Feed Branch understands that a group of these – enniatins – has been found to be present at significant levels in some consignments of grain in Northern Europe. The European Commission has asked EFSA to provide a risk assessment for the presence of these substances in animal feed. It is likely that possible risks due to the presence of further feed mycotoxins will emerge. The Secretariat will keep the Committee informed of significant developments in this area.

‘Mycotoxin binders’

8. There are products on the market that, their manufacturers claim, can be used either: to bind mycotoxins in feed (and make the toxins less available to absorption); or to denature or detoxify the mycotoxins. Previously, the legislative position of such products was unclear, so in March 2009 the Member States agreed to a European Commission proposal to introduce a new functional group of feed additives:

‘substances for additional reduction of contamination by mycotoxins’.

This group is defined as:

‘substances that can suppress or reduce the absorption or promote the excretion of mycotoxins’.

9. The amendment to Annex I of the EU Feed Additive Regulation (Regulation 1831/2003) has now been made via Commission Regulation 386/2009 (see Annex III).

10. Thus, it is now possible for such products and substances to be authorised as feed additives. General guidance already exists for those that wish to submit applications, and it is expected that specific guidance will soon be available for

additives that fall within the remit of this new functional group. Applicants will have to demonstrate that their products are safe and efficacious before authorisation can be granted. No products have been authorised under the new functional group at the time of writing. The Committee can be furnished with more information on the nature of products currently on the market and what evidence there is that they are effective, if necessary.

11. It should be noted that the Commission and Member States have made it clear that mycotoxin binder products may not be used to help 'recover' non-compliant feeds. However, it is possible that they have a role to play in reducing exposure from feeds with low-level mycotoxin contamination.

Action

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- consider the recent adoption of 'mycotoxin binders' as a new functional group of feed additives, and to state whether it would like information on the types of mycotoxin binder products on the market, and what data there are that show that they are efficacious.

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November 2009