One Hundredth Advisory Committee on Animal Feedingstuffs meeting
10th September 2025 – Online meeting

ACAF	**FSA**
Nick Wheelhouse (Chair)	Nathan Allen
Barry Bradford	Lorcan Browne
Martin Briggs	Emily Davies
Emily Burton	David Evans
Katrina Campbell	Beth Hall
Nick Jonsson	Emily Hudson
Hannah Kane	Michelle Hutchinson
Susan MacDonald	Leigh-Anne Kemp
Chris McAlinden	Kaila Lee
Donald Morrison	Francisco Matilla
Derek Renshaw	Barry Maycock
Mike Salter	James Metcalfe
Adam Smith	Claire Moni
Carla Viegas	Shila Sultana
Christel Wake	Abigail Timothy
Helen Warren	Alba Ureña Rusillo

1. Apologies

No apologies were received.

2. Welcome

The Chair welcomed members of the Committee, Secretariat and observers from the Devolved Administrations. The Chair gave a brief update relating to the issue with the GB Feed Additive Register, adding that ACAF had received a response from the FSA in reply to the letter sent by ACAF Members outlining their concerns.

3. Risk Assessment update

The Regulated Products Team Leader Francisco Matilla-Garcia gave a brief update on the current status of the EU-UK sanitary and phytosanitary (SPS) agreement, explaining that negotiations between the UK and EU are expected to begin soon. The Committee were also updated on the current outbreak on botulism in cattle. Members were reminded that the time to make claims post-meeting is now 30 days.

4. Policy update

Animal Feed Policy Adviser, Beth Hall, provided members with an update on application RP694 (*Saccharomyces cerevisiae* CNCM I-1079 as a feed additive for

calves, all other ruminant species and camelids for rearing and fattening), which is currently at the risk management stage.

5. Minutes from 99th Meeting

The Committee reviewed the minutes from the 99th ACAF meeting and provided feedback to be reviewed by the Secretariat.

6. Dossier for assessment: RP2276 3-Nitroxypropanol (3-NOP)

Nicholas Jonsson and Helen Warren both declared an indirect conflict of interest but remained in the meeting for the discussion.

The Committee reviewed an application for 3-nitrooxypropanol (3-NOP), which falls under the category “zootechnical additives”, functional group “substances that favourably affect the environment”. The additive is already authorised in ruminants for reproduction and milk production, but the applicant is seeking a new use in all growing ruminants. The Committee were asked to answer some preliminary questions posed by the Secretariat; however, a full risk assessment was not requested at this time.

The ACAF reviewed the data provided relating to the identity and characterisation of the additive. No major concerns were identified at this stage. The ACAF also reviewed a summary of the safety studies that were provided as part of the initial authorisation. Members were satisfied that the previous conclusions regarding safety for the consumer are still valid, and no major concerns were raised as this stage. Members noted that safety for the target species would require careful consideration in the full assessment, particularly as the proposed dose is higher than the dose currently authorised in ruminants for reproduction and dairy production.

Members reviewed three long-term efficacy studies in calves for fattening, and three in cattle for fattening. Two of the calf trials (Trial 1 and 2) could not be considered for assessment as they were not conducted in accordance with common farming practices and animal welfare legislation in GB. In Trial 1 (Wageningen University), calves were not provided with appropriate bedding or a suitable lying area. Although the applicant had provided a scientific justification for why straw could not be used as a bedding material, Members agreed that alternative bedding options were available and should have been considered. In Trial 2 (University of Reading), the calves were housed individually up to 14 weeks of age, which is not aligned with animal welfare rules and common farming practice in GB. Members noted a high incidence of morbidity and veterinary interventions in Trial 3 (SRUC Dairy Research Centre) and agreed that further information would be required. **The applicant would be asked to provide a statistical analysis comparing the incidence of morbidity necessitating treatment or veterinary intervention between both treatment groups.** Members also noted that the calves in Trial 3 were below the minimum age outlined in the technical guidance on the efficacy of feed additives at the start of the study, but this was considered acceptable and in line with the intended use of the additive.

No major concerns were identified regarding the trials in cattle for fattening, although Members noted that one of the trials (University of Reading) utilised calves from another 3-NOP trial with no wash-out period, and agreed this would need to be considered further as part of the full risk assessment. In addition, another trial (Teagasc) had lower statistical power than planned due to exclusion of several animals. Members were satisfied that the study was adequately powered, noting that there was a significant difference in methane emissions between the treatment and control group. Nevertheless, Members agreed that it was possible that there were differences between treatments for other parameters (such as CO_2 emissions and dry matter intake) that would not be detected due to the low power.

The Committee discussed the possible downstream effects of reduced methane production and agreed that further discussion was required in this area.

7. Dossier for assessment: RP2268 XTRACT RUMINANT, CODE X60-7065

Nicholas Jonsson, Hannah Kane and Helen Warren declared an indirect conflict of interest and remained in the meeting for the discussion.

The Committee assessed an application for the zootechnical additive XTRACT RUMINANT, CODE X60-7065. The applicant had requested authorisation for a new use in dairy cows and cows for reproduction.

Members reviewed the identity and characterisation data and noted a discrepancy: while the SDS for eugenol indicates a purity range of 50–100%, the manufacturing flowchart specifies a purity of 99%. **The applicant would be asked to confirm the actual purity of the eugenol used and, if it is as low as 50%, to clarify the composition of the remaining material.** Additionally, the Committee observed that the SDS for eugenol lists two potential impurities classified as mutagenic and carcinogenic. These substances, however, have not been reported in the CoAs for the additive. **The applicant would be asked to confirm whether these impurities are monitored and, if not, to provide a justification.** Members also highlighted that the SDSs for both eugenol and cinnamaldehyde state that the substances are intended for industrial use only. **The applicant would be asked to confirm that the eugenol and cinnamaldehyde used are of food/feed grade quality and to submit supporting evidence.** The Committee noted that the applicant had not provided impurity analyses for botanical contamination and pesticide residues for eugenol, as required under EC Regulation No 429/2008, section 2.1.4.2. **The applicant would be asked to submit the missing impurity data for eugenol to ensure compliance with regulatory requirements. The applicant would also be asked to provide the SOP for the ochratoxin analysis in capsicum oleoresin.**

Members assessed the manufacturing process data and considered it adequate. The Committee reviewed the data concerning the physical-chemical and technological properties of the additive and noted that the applicant had not provided evidence that crystallisation during spray cooling is the source of the observed nanoparticles. **The applicant would be asked to submit evidence identifying the source of the nanoparticles.**

Members assessed the stability and homogeneity data and highlighted that the storage conditions of the batches tested in the storage stability study had not been specified. **The applicant would be asked to provide details of the storage**

conditions for the tested batches. The Committee concluded that the additive appears to be stable for up to 3 months only in mineral feed, although no shelf-life claim has been made by the applicant. **The applicant would be asked to confirm the claimed shelf life of the additive once incorporated into feed, based on the available stability studies, and to update the additive's label to reflect said claim.** Members considered the homogeneity data to be adequate. The Committee noted that only eugenol had been used as a marker in the stability and homogeneity studies, despite the claim that all three active substances contribute to the additive's efficacy. **The applicant would be asked to provide stability studies—preferably in pelleted feed—using cinnamaldehyde and capsicum oleoresin as markers.** Members also noted that no pelleting stability study had been submitted, nor had the duration of the pelleting process been specified. **The applicant would be asked to submit a pelleting stability study and to confirm the residence time. The applicant would also be asked to update the additive's label to include this parameter.**

The Committee reviewed the conditions of use of the additive and discussed that the applicant had updated the proposed inclusion level—from 60-100 mg/kg feed to 40-60 mg/kg feed. **The applicant would be asked to provide a rationale for the selected lower limit of the inclusion level (40 mg/kg feed).**

Members reviewed the tolerance study and clarified that, contrary to the applicant's statement, established GLPs do exist—such as the VICH GL9 guidelines from the European Medicines Agency—which can be readily adapted for feed additive tolerance studies and efficacy trials. The Committee agreed that the tolerance study lacked key information, including how the feed was prepared, the conditions under which it was stored, the rationale for analysing only one feed sample, the location and timing of sample collection, and when the additive was tested and subsequently administered to the animals. Members argued that the applicant had not sufficiently demonstrated what was actually fed to the animals. **The applicant would be asked to provide evidence confirming that the feed was properly prepared.** Provisional on the feed analysis providing reassuring reasoning, the Committee concluded that a margin of safety of 8 could be established for the additive.

Members assessed the data submitted as evidence of consumer safety and noted that several relevant EFSA opinions on the three active substances had been published recently and were not considered in the dossier submitted in September 2024. **The applicant would be asked to conduct a comprehensive and rigorous literature review for the three active substances to ensure all relevant toxicological endpoints are addressed using the most up-to-date data.** The Committee also noted that no residue study had been provided. Instead, the applicant had based the consumer exposure assessment for capsicum oleoresin on pungency thresholds, which members considered inadequate. **The applicant would be asked to calculate consumer exposure using current UK consumption data and a worst-case scenario, i.e. assuming all feed ends up in milk and edible tissues. The applicant would also be asked to include children in the exposure assessment, as they are higher consumers of milk and represent the most sensitive population group.** In the absence of meaningful data on consumer exposure to the active ingredients and their metabolites, Members could not conclude on the consumer safety.

The Committee reviewed the data submitted as evidence of safety for users/workers and concluded that the additive is a skin and a respiratory sensitiser, as well as a skin and eye irritant. Members recommended appropriate safety measures tailored to these risks, particularly considering the presence of nanoparticles. The Committee concluded that the additive is safe for the environment.

Members reviewed several short and long-term *in vivo* efficacy studies, as well as two *in vitro* efficacy studies provided by the applicant and, given the marginal effect observed, concluded that the additive has the potential to be efficacious in dairy cows and cows for reproduction

The Committee concluded that, given that the additive is produced under HACCP principles, fully traceable, and FAMI-QS certified, the lightweight post-market monitoring plan proposed by the applicant—limited to systematic complaint tracking and review of adverse events—is considered sufficient to capture potential safety signals.

8. Response to RFI: RP2074 FUMzyme

No conflicts of interest were declared for this item.

Members reviewed the updated HACCP documentation, concluding that no further information would be required from the applicant. The applicant provided further data to demonstrate the homogeneity of the additive, however, Members noted a large loss in activity under pelleting conditions and so a conclusion on the stability and homogeneity of the additive when pelleted could not be reached. **The applicant would be asked to provide any further data available to demonstrate the stability and homogeneity of the additive when pelleted and reminded that in the absence of further data a conclusion on the stability of the additive in pelleted feed cannot be reached.**

The Committee reviewed the additional literature provided, noting that the review was performed systematically and adequately addressed the Committee's queries. Based on the findings from the literature review, Members did not require further information from the applicant.

9. Response to RFI: RP2105 *Saccharomyces cerevisiae* CNCM I-1079

Helen Warren declared an indirect conflict of interest but was allowed to remain in the meeting for the discussion.

The Committee reviewed the applicant's response regarding the proposed label text. The applicant clarified that the additive is not to be sold directly to consumers in its current form and is only to be used in industrial applications. The ACAF agreed that this should be stated explicitly on the label, as the additive in its current form is not suitable to be sold directly to consumers, due to user safety concerns and the potential for inaccurate dosing. Members noted that the applicant updated the proposed label text to include a warning that the additive should be added post-extrusion, but reiterated that stability to heat treatment and stability in feed should also be included on the label. Members raised concerns that homogeneity had not been demonstrated for post-pelleting or post-extrusion applications.

10. Response to RFI: RP2187 *Pediococcus pentosaceus* NCIMB 12674

Helen Warren declared an indirect conflict of interest but remained in the meeting for the discussion.

Members were satisfied with the Certificates of Analysis (CoA) provided by the accredited laboratory performing testing for impurities, but noted that evidence of laboratory accreditation had not been provided for the in-house testing laboratory. The applicant confirmed that the methods used were internationally recognised, but Members wanted additional assurance that the laboratory was competent to perform the methods used. **The applicant would be asked to provide verification of all testing performed in-house.**

The Committee reviewed the additional data provided by the applicant to demonstrate the lack of acquired antimicrobial resistance (AMR) genes in the strain. The applicant compared the strain with two strains previously considered safe in EFSA opinions and cited a paper that examined the antimicrobial susceptibility profile of several *P. pentosaceus* strains. Members agreed that a bioinformatic approach comparing the genomes of a large number of *P. pentosaceus* strains would have been a better approach; however, the available data suggested that the observed phenotypic resistance was attributable to intrinsic resistance, as opposed to the presence of acquired AMR genes.

In response to the request to demonstrate the genetic stability of the strain, the applicant provided a comparison of several samples of the strain with a reference, using a Random Amplified Polymorphic DNA-PCR (RAPD-PCR) approach. The ACAF noted that a detailed description of the methods used was not provided. Furthermore, Members raised concerns that RAPD-PCR is not sufficiently discriminatory to identify polymorphisms within the same strain. **The applicant would be asked to provide evidence that RAPD-PCR is a suitable technique to demonstrate genetic stability of *P. pentosaceus*; alternatively, the applicant would be asked to demonstrate genetic stability of the strain using a suitable method, such as WGS or PFGE analysis. The applicant would also be asked to provide a detailed description of the methodology used.**

Members were satisfied with the updated HACCP plan provided and agreed with the applicant's rationale for not including stability in water on the proposed label text. Members noted that a Safety Data Sheet (SDS) had not been provided for the additive, but a Product Safety Information Sheet containing relevant safety information was made available. In addition, the applicant had updated the user safety considerations on the proposed label text, although measures to reduce skin exposure were not included. As the additive is a presumed skin sensitiser and presumed skin irritant, **the applicant would be reminded to include measures to reduce skin exposure on the proposed label text**.

The Committee noted that the applicant clarified that the additive is intended to be added at a proposed minimum concentration of 1 x 10^9 CFU/kg fresh material, which was the dose used in the four *in vitro* efficacy studies provided by the applicant. The applicant also confirmed the batches used in the efficacy studies and provided

updated CoAs, which the Committee were satisfied with. Members reviewed the additional information provided regarding the methodology and statistical analysis used in the efficacy studies and were satisfied that the trials had been conducted appropriately. The ACAF concluded that the additive has the potential to improve the production of silage in moderately difficult and difficult to ensile materials, by means of improved fermentation characteristics. The Committee reiterated their previous conclusion that data cannot be extrapolated between different categories of forages and therefore no conclusion could be drawn on efficacy in easy to ensile forages.

11. Response to RFI: RP2245 GalliPro Fit 10

The RP2245 RFI response was originally assessed by Members at ACAF 99. The initial Committee response and questions can be found in the ACAF 99 minutes.

Adam Smith declared a conflict and left the meeting. Martin Briggs declared an indirect conflict and remained in the meeting.

Members assessed the additional annexes submitted by the applicant and agree that the applicant supplied all relevant documentation that was previously submitted to EFSA.

Members noted that the applicant did not present quantitative PCR in the standard sense however they accepted that the quantification method used was reasonable. The Committee reiterated that the applicant failed to provide the necessary verification documentation for the production site. Members commented that the applicant failed to demonstrate homogeneity and did not conduct homogeneity testing in accordance with guidance.

The Committee noted that stability loss exceeded 30% after 48 hours. The Committee concluded that stability was only demonstrated up to 24 hours. The Committee were satisfied that the applicant had provided sufficient documentation regarding HACCP plans and plant documentation. The Committee were satisfied that the applicant had provided unredacted EFSA opinions.

It was highlighted that EFSA had raised concerns regarding the anti-foaming agent used by the applicant. The agent includes substances not authorised as feed additives and are not feed materials which could have potential implications on safety for the target species and the environment. The applicant had confirmed that all substances in the active agent were accepted for use either as food or feed additives and the applicant performed a worst-case risk assessment which seemed acceptable to the Committee and indicated no concern to the target species or the environment.

It was noted that EFSA highlighted that the original shelf-life study used three sample batches which had the same initial spore counts; it was confirmed by the applicant that the samples were not from independent batches. The applicant conducted new shelf-life studies; two were complete and one was still ongoing until July next year, but the interim results were provided.

In a response to EFSA, the applicant provided an in vitro eye irritation study of the additive; the results confirmed that, in line with the original formulation, GalliPro® Fit 10 is not characterised as an eye irritant.

12. Draft safety assessments: RP2071 and RP2157

Emily Burton declared a direct conflict of interest and left the meeting.

Members were presented with draft Safety Assessment documents for applications RP2071 and RP2157.

Members reviewed the draft safety assessment provided for RP2071 but raised concerns that the data provided was not sufficient to support the proposed shelf-life of 24 months. The applicant had provided shelf-life stability data under accelerated conditions, but the Committee agreed that it was not acceptable to extrapolate from this data to determine the shelf-life, without a real-time study to confirm the proposed shelf-life. **The applicant would be asked to provide the latest results of the ongoing shelf-life study for Enterosure™ Conc**. Furthermore, the ACAF noted that a detailed quantitative composition had not been provided for the commercial premixure, Enterosure™. **The applicant would be asked to provide the quantitative composition of Enterosure™.**

13. Response to RFI: RP2107 and RP2258

Helen Warren declared an indirect conflict of interest and remained in the meeting for this item.

The Committee discussed the applicant's response to the RFI which related to both applications, RP2107 and RP2258. While evaluating the toxicological studies for the safety of the consumer, members concluded that chromium methionine should be regarded as mutagenic at the site of exposure. In the RFI, the applicant was asked to provide further evidence that the additive is not genotoxic *in vivo*.

Members discussed if they agree with the applicant's response that no further genotoxicity data should be needed to reach a positive conclusion on the safety of the additive. The Committee stated that they cannot conclude on the risk of genotoxicity of Chromium DL Methionine at the site of contact (i.e. the GI tract). It was discussed that Chromium DL Methionine may potentially dissociate in the GI tract to its components, and there does not seem to be any time frame or experimental evidence of this. In the absence of additional data, or sound rational based on literature, additional experimental work could be considered, such as an in vivo comet assay looking at exposed tissues. This would have been required to confirm the absence of genotoxicity at the site of contact.

14. Scoping exercise for horizon scanning

Members proposed topics for the upcoming horizon scanning exercise.

15. Any other business

An update was provided in relation to the Science Council.

Next ACAF meeting: 30th October in Foss House, York.