IPIFF position paper on the use of insect proteins as animal feed

Context and summary of the latest EU reforms

IPIFF believes that insects will soon constitute a reliable alternative or addition to fishmeal feed formulae for aquaculture: insect nutritional characteristics (e.g. protein content, amino acid profile and/or digestibility levels) are indeed comparable to those of fishmeal products, making them a pertinent substitute or addition in the diet of certain fish species (e.g. trout or Atlantic Salmon) or shellfish (e.g. shrimps). However, the EU ‘feed ban rules’ contained in the so called ‘TSE Regulation’ (i.e. Article 7 and Annex IV of Regulation 999/2001) so far prohibited the use of animal derived protein to be used in feed for farmed animals, including for fish.

However, the European Commission recently adopted a Regulation amending the TSE Regulation: Regulation (EU) N° 2017/893 partially uplifts the feed ban rules regarding the use of insect processed animal proteins (PAPs) for aquaculture animals. This new EU legislation was adopted on 24 May 2017 and the authorisation is officially applicable since 1st July 2017.

- the text introduces a specific section for insects & insect products (Annex IV, section F of Regulation 999/2001) which allows insect-producers ‘to make use of the same authorisation’ as the one benefiting to those producing and processing other non-ruminant animals (i.e. pigs & poultry) for feeding aquaculture animals.

- The authorisation is however limited to seven insect species (see Chapter II of Annex X to Regulation 142/2011), namely to the followings: black soldier fly, house fly, yellow mealworm, lesser mealworm, house cricket, banded cricket & field cricket.

- Likewise other farmed animals, these species may only be fed with ‘feed grade materials’ (see below for more details). The same rules apply to insect PAPs that are imported from EU third countries.

The abovementioned reform was accompanied with the recent adoption of another piece of legislation - i.e. Regulation (EU) No 2017/1017 which amended Regulation 68/2013 on the EU Catalogue of feed materials. This Catalogue, which aims to list in a non-exhaustive manner the different feed materials that are currently being used in the EU, introduces revised descriptions explicitly referring to processed animal proteins and fats from insects (see names entries 9.4.1 ‘processed animal protein’ & 9.2.1 ‘animal fat’, whose descriptions now refer to invertebrates). Furthermore, the text requires operators to indicate on the label the name of the animal species as well as its life stage. Feed business operators shall adapt their labels to these new labelling requirements before 11 January 2018.
IPIFF welcomes the ‘aqua feed’ authorisation & the revision of the EU Catalogue of feed materials

IPIFF reaction to the EU reform

Considering the potential of insect proteins to provide an economically and ecologically sustainable source of proteins for animals, IPIFF has always pleaded for the revision of current EU legislation with the view to allowing insect proteins (insect PAPs) to be used as a new source of proteins for farmed animals.

Against this background, IPIFF welcomed the EU Institutions move to authorise their use in feed for aquaculture animals.

IPIFF and its members also agree with the particular conditions laid down in the new legislation, namely with regard to the followings:

- The authorisation of insect PAPs to be limited to insects fed on ‘feed grade substrates’, which is consistent with the EFSA recent scientific opinion (from 8 October 2015)

- The definition of a ‘positive list of insect species’ (see list included in Chapter II of Annex X to Regulation (EU) No 142/2011) since the insects here covered reflect the main species which are currently reared in the EU at industrial scale. One should however acknowledge that a few other species may have a real potential for feed use in the future. Outcome of these research activities may command the future modification of the legislation so as to widen this authorisation to new insect species.

Furthermore, IPIFF welcomes the inclusion of explicit references to processed proteins and fats from insects in the latest updated version of the EU Catalogue of feed materials (see above): in our view, these changes will give legal certainty to producers placing insects and/or insect derived products on the EU market. Furthermore, this new Regulation will contribute to increase the transparency towards the feed chain operators using these products.

IPIFF commitments on the implementation of the aqua feed authorisation

IPIFF members are committed to take the necessary steps with view to ensure full implementation of the provisions contained in the aqua feed authorisation. To this end, the IPIFF association is currently developing an EU guideline on ‘good hygiene principles’ for the insect sector. This document, whose publication is expected by the end of the year 2017 or early 2018, aims to describe the ‘minimum’ general standards followed by insect operators through their production activities, whilst supporting them in the effective application of the general requirements stemming from EU food & feed safety legislations. Covering both food and feed production activities as well as all production steps (e.g. breeding, feedstock control, killing, processing stages up to final delivery of the product), we also trust that this document should help insect businesses to step up their production methods to minimum safety standards.

IPIFF may support new legislative reforms for a wider use of insects for animal feed

Current EU framework

Insects kept in the EU for the production of food, feed or other purposes are considered as ‘farmed animals’ according to Regulation (EC) n° 1069/2009 (article 3.5 & 3.6) which means that these are governed by the ‘general EU feed rules’: as consequence, insects cannot be fed with feed materials
which are prohibited in animal feed, including in particular slurry or manure\textsuperscript{1}, catering waste\textsuperscript{2} or unprocessed former foodstuffs containing meat or fish\textsuperscript{3}.

The feed ban rules laid down in the TSE Regulation still prohibit the use of PAP derived from insect in feed for other livestock animals such as monogastric species (i.e. pigs & poultry species) - see above for more details.

Overall context & IPIFF vision on the future development of the insect sector.

IPIFF is convinced that insects may soon constitute a reliable alternative or addition to existing protein sources in feed formulae for livestock animals. Whilst IPIFF does not however consider that the total replacement of major sources such as soy meal is realistic (i.e. significant differences in terms of nutrient and/or amino acid profile), these products may represent a new solution, notably in a context of increasing EU dependency on protein imports for animal feed use.

The competitiveness of the EU insect production sector & its capacity to achieve tangible volumes will however mainly depend on the possibility for its actors to deploy their production activities at wider scale. Today a world leader in terms of innovation & technological advancement, the upscaling of European producers would be much facilitated by the ‘concretisation of new EU legislative opportunities’, notably in the feed sector.

IPIFF requests for modifying the current EU legislation

Pending the availability of validated analytical /detection methods, IPIFF pleads for a new ‘relaxation’ of the EU feed ban rules so as to authorise the use of insect PAPs in feed for other non-ruminant livestock animals (pigs & poultry species).

In our view, further investigations should also be engaged on options for extending the EU legislative possibilities to reuse/ upgrade other valuable resources (i.e. other than the ones already authorised by the EU legislation) through insects. One priority subject of analysis could notably be to explore the conditions for the safe use of unsold products from supermarkets or discarded materials due to manufacturing or packaging defects - or ‘former foodstuffs’ - (i.e. by facilitating the use of vegetal based products as already authorised by the legislation & investigate the options for authorising former foodstuffs containing meat or fish) & of food losses originating from restaurants or catering establishments. To this end, IPIFF supports the mandating of the European Food Safety Authority to deliver fully documented conclusions on the potential risks associated with the use of such materials. Their authorisation as feed for insects could be envisaged, in case demonstration is made that these do not entail any safety risks nor adverse health effects for the target animals.

Several IPIFF members are already conducting internal research programmes or collaborating with prominent academics and research institutes (such as through participation EU funded research projects) to advance available research on those subjects.

\textsuperscript{1} See annex III of Regulation (CE) n°767/2009 & article 9 of Regulation n°1069/2009;
\textsuperscript{2} See article 11.1.b of Regulation (CE) n°1069/2009)
\textsuperscript{3} See article 10 f. of Regulation 142/2011).