Safety and efficacy of Bactocell PA (*Pediococcus acidilactici*) as feed additive for shrimp

**Scientific Opinion of the Panel on Additives and Products or Substances used in Animal Feed**

(Question No EFSA-Q-2008-421)

**Adopted on 1 April 2009**

**SUMMARY**

Following a request from the European Commission, the European Food Safety Authority (EFSA) was asked to deliver a scientific opinion on safety and efficacy of the product Bactocell PA for shrimp.

Bactocell PA is the trade name for a feed additive based on viable cells of *Pediococcus acidilactici*. The product is intended for use with shrimp to improve their overall production and survival, and consequently increase yield. It is recommended to be included in feed for the entire production period at a minimum content of $1 \times 10^9$ and a maximum content of $1 \times 10^{10}$ CFU kg$^{-1}$ complete feedingstuff. This product is already authorised for use in pigs and chickens for fattening. The Company has applied for an authorisation for a period of ten years under the category of zootechnical additives (functional group: other zootechnical additives).

This organism is considered by EFSA to have QPS status, therefore no assessment of safety for the target species, the consumer and the wider environment is required. Consequently, in the present assessment the Panel on Additives and Products or Substances used in Animal Feed (FEEDAP) has considered only the efficacy of Bactocell PA for the target species and the safety for the users.

The applicant has provided three studies in which survivability and growth performance were improved by the addition of Bactocell PA. However, all three experiments were made in a French territory of the Pacific region with a shrimp species (*Litopenaeus stylirostris*) not presently used in other European aquaculture practices. The high mortality recorded in those experiments is typical of the region in which vibriosis is commonly encountered but substantially higher to that expected under other European conditions. The FEEDAP Panel is unable to extrapolate those results to other European shrimp farming conditions and therefore cannot conclude on the efficacy of the product.

On the basis of the evidence presented, Bactocell PA can be considered to be non-irritant to the skin and eyes of users. The small particle size and high dusting potential of the product represents a risk of respiratory sensitisation. Given the proteinacious nature of the material, the FEEDAP Panel recommends that it should be considered as a respiratory sensitiser and treated accordingly.
Key words: zootechnical additive, Bactocell PA, *Pediococcus acidilactici*, micro-organism, shrimp, *Litopenaeus stylirostris*, efficacy, safety, QPS