Starfish as feedstuff

Problem
An increase in demand for organic feedstuffs is expected to limit protein availability. Therefore, new and more sustainable protein-rich ingredients are needed.

Solution
Starfish are caught to reduce predation on farmed mussels. Starfish meal contains 38-70% protein and can be used to partially replace other protein-rich ingredients in monogastric animal feed.

Benefits
Feeding starfish meal gives comparable growth to feeding fishmeal in piglets. For layers, egg production and quality are maintained at normal levels when feeding up to 8% starfish meal.

Practical recommendation
- Starfish should be harvested, at the earliest, three months before spawning to have highest protein and lowest ash content.
- High calcium levels limit the inclusion level of starfish meal in piglets’ diets to around 5%.
- Starfish meal is not organically certified but can still be used because it is not of agricultural origin.
- Starfish meal is already commercially available in Denmark.
- Diets can be optimized regarding amino acids and with lower crude protein.

Figure 1: Starfish before processing. Photo: Jan Værum Nørgaard

Figure 2: Boat specialized in fishing starfish. Photo: Pia Sørensen

Applicability box

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<thead>
<tr>
<th>Theme</th>
<th>Pigs, layers</th>
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<td>Application time</td>
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<td>Required time</td>
<td>Time of feeding</td>
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<tr>
<td>Equipment</td>
<td>No extra equipment needed for feeding</td>
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Further information

Further reading


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Weblinks

- Check the Organic Farm Knowledge platform www.organic-farmknowledge.org for more practical recommendations

About this practice abstract and OK-Net EcoFeed

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