

# Seaweed as feed supplement

## Problem

The growth and health of piglets is reduced directly after weaning because of high incidence of diarrhoea.

## Solution

Feeding low doses of seaweed to piglets may positively affect gut health and reduce diarrhoea. It will also supply several minerals.

## Benefits

Polysaccharides in seaweeds can have antimicrobial, prebiotic or immunomodulatory effects, alleviating negative effects linked to weaning.

## Applicability box

### Theme

Pigs - Crop production - Animal husbandry - Feed and nutrition - Feed processing and handling - Arable crops - Forage - Production systems - Nutritive values and needs - Ration planning

### Geographical coverage

Coastal regions

### Application time

All year

### Required time

Time of feeding

### Period of impact

Immediate

### Equipment

No extra equipment needed for feeding

### Best in

Brown seaweeds

## Practical Recommendations

- Effectivity might differ depending on the seaweed type, harvest season and processing method. Brown and red seaweed species may be better than green (Figure 1).
- Several commercial seaweed products can be used, and it is important to ask for documentation of effect before relying on e.g. effect on diarrhoea.
- High levels of macro and micro minerals have to be taken into account when composing diets with seaweed.
- Many seaweed extracts are available, which may not be suitable for organic production.



Figure 1: Brown seaweed, sugar kelp. Photo: Annette Bruhn



Figure 2: Organic piglets may benefit from seaweed. Photo: Jan Værum Nørgaard

## Further information

### Reading

- Dierick, N., A. Obyn, and S. De Smet. 2009. Effect of feeding intact brown seaweed *Ascophyllum nodosum* on some digestive parameters and on iodine content in edible tissues in pigs. *Journal of the Science of Food and Agriculture* 89(4):584-594. (Article) doi: 10.1002/jsfa.3480
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- Michiels, J., E. Skrivanova, J. Missotten, A. Obyn, J. Mrazek, S. De Smet, and N. Dierick. 2012. Intact brown seaweed (*Ascophyllum nodosum*) in diets of weaned piglets: effects on performance, gut bacteria and morphology and plasma oxidative status. *Journal of animal physiology and animal nutrition* 96(6):1101-1111.

### Weblinks

- Check the [Organic Farm Knowledge](#) platform for more practical recommendations.

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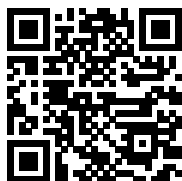
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**OK-Net EcoFeed:**

<https://orgprints.org/view/projects/OKNetEcoFeed.html>

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**Project website:** <https://ok-net-ecofeed.eu/>

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