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Insect larvae make good fodder

The black soldier fly can replace soymeal as a source of protein in the diet of pigs.

A multidisciplinary research team from WUR and Leiden University studied two groups of eight pigs. One group was fed a conventional diet of soymeal as the protein source; the other group was given a diet of black soldier fly larvae. These insects were produced by Protix, a major Dutch producer of insect larvae for animal feed. The larvae can be grown on waste and residual products from the food industry, which makes them a sustainable alternative to soya.

The larvae are also a sustainable alternative to soya

The researchers fed the two groups of pigs, then measured their blood values and the bacterial composition in their intestines. The pigs that were fed the insect larvae had more bacteria in their intestines of the genus *Bifidobacterium*, which has been shown to have positive health effects in humans and animals. The researchers also have indications that the insect feed contains microbiota that suppress pathogenic bacteria. This suggests that insect feed is actually healthier than soya.

Permission

The researchers used a FeedOmics approach, explains lead researcher Soumia Kar of Wageningen Livestock Research. That meant they determined the impact of the diet in both the intestines and the blood to give a very detailed picture of the effect of the feed. They published the results in *Nature Scientific Reports*.

The study is very timely: the European Commission has recently given permission for protein from insects to be included in animal feed. Kar expects that to give the production of insects for animal feed a boost. AS