

Green protein to replace soy in feed

Main results / outcomes

Full-scale biorefining plant on the Danish farm Asumgaard produces green protein, which is used to replace soy in feed for monogastric animals such as pigs and poultry. Green protein is a protein extracted from clover grass by biorefining with the aim of using it as a feed ingredient. The green protein has an amino acid composition that makes it particularly suitable for one-stomached animals, and it can therefore be used instead of imported soy. Feed trials with grass protein for organic pigs have shown that grass protein concentrate can have the same feed value as soy cake.

Practical recommendations

Raw material production, harvesting and logistics account for a significant share of the economy for green biorefining. This part should have great focus.

If the quality of processed grass is not optimal, the yields of the protein concentrate will be too low. The fiber fraction can be used for cattle feed or be used for biogas.

During autumn 2022, grass protein from Asumgaard was used in feed mixtures for pigs, and the pigs liked it.

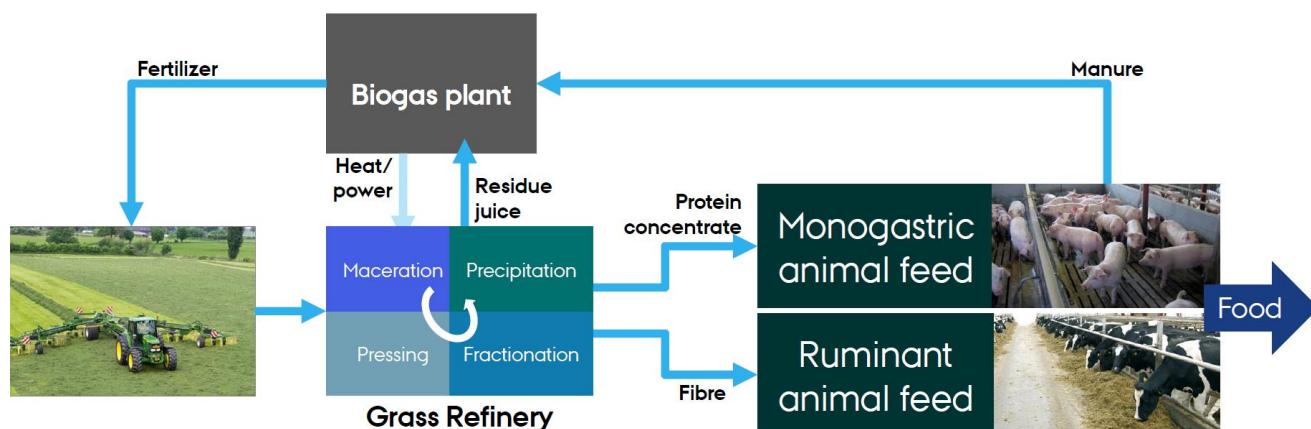


Figure 1: The green protein concept (Morten Amby-Jensen)

Further information

<https://www.agrofossilfree.eu/2023/03/09/green-protein-extracted-from-clover-grass-case-study-in-denmark/>
<https://biorefine.dk/p/produktion>
<https://ausumgaard.dk/>

About this abstract

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Date: March 2022

AgroFossilFree is a H2020 multi-actor project that will evaluate the current status in EU agriculture regarding energy use and assess existing needs, allowing farmers to optimize agricultural production through more efficient energy use and reduced GHG emissions, resulting in economic, agronomic and environmental benefits. AgroFossilFree will create a framework under which critical stakeholders will cooperate to evaluate and promote the currently available Fossil-Energy-Free Technologies and Strategies (FEFTS) in EU agriculture. The project is running from October 2020 to September 2023.

Website: www.agrofossilfree.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement ID 101000496

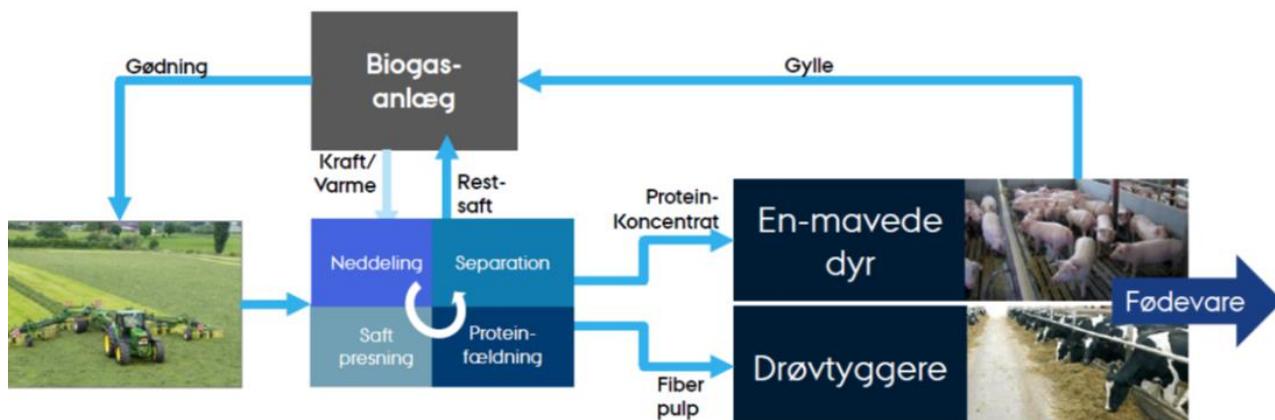
Grøn protein til erstatning af soja i foder

Resultater

Fuldkala bioraffineringsanlæg på den danske gård Ausumgaard producerer grønt protein, der bruges til at erstatte soja i foder til en-mavede dyr som svin og fjerkær. Grønt protein er et protein udvundet af kløvergræs ved bioraffinering med det formål, at bruge det som foderingrediens. Det grønne protein har en aminosyresammensætning, der gør det særligt velegnet til en-mavede dyr, og det kan derfor bruges i stedet for importeret soja. Foderforsøg med græsprotein til økologiske grise har vist, at græsproteinkoncentrat kan have samme foderværdi som sojakage.

Praksis og anbefalinger

Råvareproduktion, høst og logistik udgør en væsentlig del af økonomien for grøn bioraffinering. Denne del skal have stor fokus. Hvis kvaliteten af græs ikke er optimal, vil udbyttet af proteinkoncentratet blive for lavt. Fiberfraktionen kan bruges til kvægfoder eller bruges til biogas. I løbet af efteråret 2022 er græsprotein fra Ausumgaard blevet anvendt i foderblandinger til grise, og grisene kunne lide det.



Figur 1: Grøn protein koncept (Morten Amby-Jensen)

Yderlig information

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<https://biorefine.dk/p/produktion>
<https://ausumgaard.dk/>

Om dette abstrakt

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Dato: March 2022

AgroFossilFree er et EU Horizon 2020 projekt, der skal evaluere den nuværende status i EU's landbrug med hensyn til energiforbrug og vurdere eksisterende behov, således at landmændene får mulighed for at optimere landbrugsproduktionen gennem mere effektiv energianvendelse og reducerede drivhusgasemissioner. Dette vil resulterer i økonomiske, agronomiske og miljømæssige fordele. AgroFossilFree vil skabe en ramme, hvorunder centrale interesser kan samarbejde om at evaluere og fremme de aktuelt tilgængelige fossil-frie energiteknologier og -strategier (FEFTS) indenfor EU's landbrug. Projektet løber fra oktober 2020 til september 2023.

Website: www.agrofossilfree.eu



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