



## Project

# Cultivation of duckweed for protein

Lemna (duckweed) is the smallest flowering plant on Earth that multiplies rapidly and is rich with protein. This is exactly what the world needs. "It feels good because it can offer a solution within an attainable timeframe," researcher Ingrid van der Meer explains.

More and more people are eating meat. Approximately 2.5 kilos of plant protein are needed to produce one kilo of meat. In her search for protein, Ingrid ran into duckweed. "It offers good chances as a protein crop," she explains. "It does not make use of farming land and it can grow in a basin on the farm or in a simple greenhouse on diluted manure. It grows very rapidly and contains a lot of protein. One hectare of duckweed produces just as much protein as ten hectares of soya."

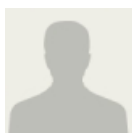
All the disciplines needed are present at Wageningen to help research the use of duckweed as a possible new protein crop that can be used world-wide. The most important points of attention are whether duckweed is suitable for animal feed as well as for human consumption, to determine the optimal cultivation circumstances, and the profiles of the different varieties of proteins as well as the method of processing.

"It looks promising, especially the harvest yield," says Van der Meer. "But there are many steps left to be taken. Cultivation with industrial water may be suitable because we know that it contributes to water purification. We want to get started quickly and conduct a pilot test, among others. I am optimistic. Using duckweed as animal feed to produce meat could be a solution. A burger filled with duckweed protein on my plate? That would be a great accomplishment."



*Dr. Ingrid van der Meer, Senior Researcher Bioscience*

Back to all Food for Thought, Thought for Food projects (</en/Benefactors/Areas-to-support/Global-Food-Challenges/All-projects-about-global-food-challenges.htm>)



(</en/Persons/dr.-IM-Ingrid-van-der-Meer.htm>)

Contact

dr. IM (Ingrid) van der Meer (</en/Persons/dr.-IM-Ingrid-van-der-Meer.htm>)

Contact form (</en/show/Cultivation-of-duckweed-for-protein.htm?contactpersonid=2819&presentationid=399132>)

Project information

## Cultivation of duckweed for protein

Status: Planned

Partners: [Wageningen UR \(/en.htm\)](/en.htm)

---

Project	Cultivation of duckweed as a source of protein
Duration	4 years
Investment goal	Research of duckweed as animal feed or as human food
Funding required	€ 2.2 million

---

“

*“ We are on the threshold of a development needed to produce enough protein for the whole world ”*

Dr. Ingrid van der Meer, Senior Researcher Bioscience