

DINO: the world's first row-straddling weeding robot to reach the market



Dino in the fields of the Somme Department's Chamber of Agriculture for the Farm 3.0 project

A true technological feat, Dino is the world's first row-straddling mechanical weeding robot to officially reach the international market.

French farmbot specialist Naïo Technologies has already scheduled the delivery of Dino's first four customers: the Chamber of Agriculture of the French Somme Department, cooperative groups Agrial and Picvert as well as a Danish customer who aims to conduct further experiments on popular field crops.

A wide range of vegetable growers in search of weeding solutions is expected to join the list in the months to come.

Dino: objectives and operating principles

The Dino robot was developed according to the same principles as [the Oz weeding robot](#) but has been adapted in order to meet the needs of larger farms and weed large-scale vegetable beds. Dino is a precision tool that mechanically weeds vegetable rows to reduce the use of chemical inputs, increase farm productivity and deliver high quality vegetables to consumers.

The large-scale weeding robot autonomously guides itself around vegetable plots thanks to its RTK GPS system. It's also equipped with a set of cameras that detect lettuce rows and accurately guide the robot's weeding tools as close as possible to the crops.

Dino: upcoming deliveries and projects for 2017



Dino in the Picvert lettuce fields

In 2017, Naïo Technologies established several partnerships to submit Dino to a range of different test situations while providing an efficient and eco-friendly mechanical weeding solution to its first customers:

- The **Chamber of Agriculture** of the French Somme Department plans to use Dino in the framework of their Farm 3.0 project,
- [Picvert](#), a vegetable grower in Northern France and Portugal, will use it to weed lettuce and salad greens,
- French cooperative group **Agrial** also aims to put Dino to work in their lettuce fields,
- In **Denmark**, Dino will be used for weeding trials on popular field crops.

“This year, Naïo Technologies will market 10 Dino robots as part of their partnerships with different agricultural players in France and Denmark. Lettuce is the first crop on our list this year. Trials will also be conducted on other types of vegetables as well as on field crops,” explains Lionel Montchalin, Naïo Technologies’ product manager.

Technical data

- Autonomy: up to 8 hours
- Size: Length 2.50 m / Height 1.30 m / Adjustable distance between wheel axis: 1.40 m to 1.80 m
- Operating width: rows of 1.20 m to 1.60 m
- Weight: 800 kg
- Speed: 3 to 4 km/h
- Work output: 3 to 5 ha/day

Dino in action:



<https://youtu.be/h8oWl6FD-7c>

More about the Dino robot:

<http://www.naio-technologies.com/en/agricultural-equipment/large-scale-vegetable-weeding-robot/>