Smart technology for soybean production

Period: 2021-2024 | Total budget: € 660,000

In this public-private research project funded by Dutch Topsector AgriFood and in-kind contributions, eleven Brazilian and Dutch partners work together on the development and implementation of technologies and know-how to develop smarter soybean production. The private partners are Bioscope, GDM Seeds, Hiber, Oro Agri, Rometron, Stara and Syngenta companies. The public research partners are Embrapa, Fundaçao ABC, UFSM and WUR. Together, these partners have the knowledge and technology of sensors, IoT, decision support, new varieties, biological control agents, connectivity and actuation (robotics) for precise application of crop protection products and fertilisers, in order to make soybean production more sustainable.

The partners will work on innovations in the coming four years (2021-2024) and deliver results on the following four smart farming topics:

- Innovative weed control in soybean using chlorophyll-sensing technology in combination with decision support and accurate application technology to enable precise, site specific and variable rate herbicide treatment of weeds with low environmental impact;
- Innovative disease control in soybean using field-specific data in combination with decision support and accurate application technology to enable sustainable disease management, including resistance management;
- Innovative pest and disease control by combining different control methods such as natural products, resistant varieties and indirect methods;
- Innovative algorithms to re-use past and in-season data produced by sensors and machinery of the project partners.