



PRESS RELEASE

High-precision liquid manure spreading from John Deere and Vogelsang

• Joint initiative for sustainable organic fertilization

Essen/Oldb., November 6, 2019 – John Deere and Vogelsang have launched a joint project to promote more sustainable organic fertilizer application. The combination of John Deere Section Control and Vogelsang's automatic partial width Comfort Flow Control (CFC) section control system enables highly precise spreading of liquid manure.

"We are using our joint expertise to ensure that plants can be supplied with the necessary nutrients through more precise liquid manure application," said John Deere Intelligent Solutions Group marketing manager Region 2 Alexander Berges. "Precise organic fertilization has significant advantages over mineral fertilization. It improves the CO2 balance of agricultural production and reduces ammonia emissions. Higher yields, more consistent plant growth and protection of water courses are further positive benefits."

Harald Vogelsang, managing director of Vogelsang GmbH & Co. KG, added: "The sitespecific and need-based application of liquid manure enables modern agriculture to operate more sustainably and to promote the triad of economy, ecology and social acceptance."

Accurate liquid manure spreading in practice

This joint technology project demonstrates in practice how accurately liquid manure can be applied using Vogelsang's new BlackBird trailing shoe system with CFC automatic partial width section control and ExaCut ECQ precision distributors. Operated via the incab Generation 4 Display, John Deere Section Control opens and closes the system's individual hoses automatically and very precisely according to the tanker's GPS position.

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This reduces overlaps and errors to an absolute minimum and avoids over- or undersupply of nutrients to the plants.

Flexible technology for concise results

Vogelsang has also developed new valve technology, with air bellows in the hose outlets of the spreading devices for switching off the individual boom sections. The inflated air bellows close the individual boom sections or boom section groups; to release the respective hose outlets, the operator lets out the air. This electropneumatic control of the individual hoses enables fast, precise switching operations. The application booms are available in versions with single hose control or with control of hose outlets combined in sections.

John Deere's Section Control is compatible with all common satellite correction signals, ranging from the free SF1 up to the high-precision and repeatable RTK signal. This allows up to 255 boom sections to be controlled fully automatically to an accuracy of +/-3 cm in previously defined areas of the field.

Complete integration of both systems into the John Deere operating terminal enables Section Control and CFC to ensure such precise slurry application. Additional integration of the HarvestLab 3000 manure sensor enables continuous measurement of the nutrients in the slurry, so not only m³/ha but also kg/ha N, P and K can be applied as with mineral fertilisers. The HarvestLab sensor is DLG-certified for measuring accuracy with N and P, which is at the same level as accredited laboratories.

A video of this joint project with the results of the high-precision liquid manure spreading demonstration <u>can be found here</u>.

For more information, visit: vogelsang.info

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Images:



Image 1: John Deere and Vogelsang have launched a joint project to promote more sustainable organic fertilizer application.



Image 2: The combination of John Deere SectionControl and Vogelsang's Comfort Flow Control enables highly precise spreading of liquid manure.

Image source for all images: Vogelsang GmbH & Co. KG

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