

## Press Release

John Deere at EuroTier 2022

### **The Dairy & Livestock production system introduces itself**

*Walldorf, 15 November 2022* – At this year's EuroTier, John Deere will present the Dairy & Livestock production system in more detail. For the first time after the restructuring of the company, visitors will be shown the solutions for forage production in dairy and livestock farming. The John Deere stand (D16) will be located in Hall 27.

Good quality forage is essential for every livestock farm to achieve high milk and fattening yields. But quality is strongly dependent on the cultivation and harvesting methods. John Deere has its own production system for this, in which each individual production step is examined in detail.

At EuroTier, the production steps of planting, organic fertilization, harvesting and feeding will be examined.



The company will present how feed quality, especially of silage, can be recorded and increased with modern technologies and digital solutions. It will also show how the organic fertiliser slurry can be used efficiently. The focus is on the HarvestLab™ 3000 sensor.

## **One Sensor, four applications**

### Sowing & Organic Fertilization

Due to political framework conditions and increasingly narrow harvest windows, organic fertilizer can only be applied in certain, short periods of time. This makes it more important to match fertilizer application precisely to the needs of the crops.

The strip-till application method is a particularly efficient and low-emission process that is perfectly suited to the row crop maize. Immediately before sowing, the slurry is applied in bands about 10 to 12 cm deep into the soil. Corn is then sown using a precision drill, which places the kernels precisely in the slurry belts. Placement is about 7cm above the slurry to avoid emergence damage. Placement above the nutrient-saturated area in the soil guarantees improved nutrient availability and thus an increased yield.

Precise placement is a prerequisite for John Deere's AutoPath system. It records the position of the slurry belts during slurry application and stores it in the Operations Center. During subsequent seeding, the GPS data is used to control the drill. Even with irregular strokes and cornering, the seeds are always placed exactly above the slurry belt.

At the same time, the sowing rate can be adapted to soil differences. Site-specific maize seeding ensures an optimized standing space for each plant and the best possible supply of water and nutrients. The 1725NT ExactEmerge precision air seeder from John Deere offers the best conditions for this. Not only does it place the seed extremely precisely, but it can also be controlled via corresponding seeding maps.

In addition to precise application, the analysis of slurry content is also a basic prerequisite for needs-based fertilization. This is where the HarvestLab™ 3000 sensor is used in the production system. The near-infrared measurement always detects the current amount of nitrogen, phosphorus and potassium that is currently being applied with the slurry, even with strongly fluctuating values. Controlled by the permanent measurement and the demand from a previously created application map, the tractor automatically varies the application rate with the slurry tanker and thus distributes the desired nutrient quantity site-specifically.

### Harvest & Planning

The HarvestLab™ comes into play again when harvesting maize. Since 2011, the sensor has proven itself on the forage harvester. It not only measures the moisture of the crop, but also the ingredients, such as sugar content, starch content, protein and ADF content. The data is recorded directly on the machine in a matter of seconds during work and transmitted online to the Operations Centre. Based on the harvest results, field-specific differences can be determined and used as a data basis for the cultivation of the subsequent crop.

### Feeding

The fermentation process in the silo leads to a change in the ingredients. In order to adjust the feed ration exactly to the needs of the animals, the HarvestLab™ sensor can also be used as a tabletop device. This helps to avoid a deficiency or surplus of nutrients.

If cereals are to be used in the feed ration, the nutrient content can now also be determined on the combine harvester. Here, the near-infrared sensor measures the moisture, starch and protein content of threshed crops.