

## Nuscience and ILVO tour

- Destination: Dairy farm, Nuscience (Drongen) and ILVO Animal Sciences (Melle)
- Friday, 30 August, from 8.00 to 17.00 h
- Total distance: 50 km

The **dairy farm of LV Van de Keere** is situated in Zeveneken-Lochristi, between Ghent and Sint-Niklaas/Antwerp. The family company is managed by Dirk Van de Keere, his wife Marleen and their son Thomas. They milk 230 cows on a 32 point De Laval rotary milking parlour. Water beds, cow brushes, air ventilators and fully automated weather controlled curtain system enhance the cow comfort in the 6-root stable, which was built in 2013. Dirk, Marleen and Thomas are enthusiastic farmers that are engaged in several Flemish farmers organizations and will provide visitors with a clear story on how they see the future for dairy farmers in Flanders and more broadly in Europe.

**Nuscience** is ambitious in addressing contemporary challenges through nutritional strategies: we offer innovative solutions for pigs, poultry and cattle. For example, we develop and produce premixes, concentrates, mineral mixtures, young animal feed and functional feed ingredients for the animal feed industry. The Nuscience factory in Drongen received the 'Factory of the Future Award' in 2017. This recognition puts manufacturers in the spotlight who are facing the challenges of the fourth industrial revolution - digitization - in a future-oriented and systematic way. Nuscience is the first company in the animal feed industry to receive the award. We will visit the Nuscience company as well as the awarded factory itself.

**ILVO** stands for multidisciplinary, independent research and specialized service provision in all fields related to agriculture, fisheries and food in Flanders. ILVO, an internationally recognized scientific institute, is part of the Government of Flanders.

**The Animal Science Research** of ILVO focuses on sustainable cattle, pig and small livestock husbandry. We aim to support farmers achieving cost-effective livestock farming systems, taking into account the most important societal challenges: impact on climate and environment, animal welfare, tasteful and healthy products and valorization of feed materials. Our main expertise's to do so are animal nutrition, animal and farm management, feed evaluation, animal physiology and animal behavior and welfare.

**The ILVO dairy research stable** is built for about 168 Holstein dairy cattle and is equipped with a Delaval Herringbone 25°C milking parlour (2x7) and 2 Delaval AMS systems. The research stable is equipped with modern technology for registration of roughage and concentrate intake, milk production and milk composition and methane emission measurements on individual cow level. The data gathering in the stable is further enlarged through De Laval sensor technologies for registration of cow activity, body weight, BCS for all cows and a somatic cell counter (ODC) for cows on the AMS systems. Besides these technologies, the ILVO stable is able to early detect lameness. Finally, ILVO is installing technologies in the stable to measure ammonia emission on barn-level and emission coming from the manure pit or slatted floor. Apart from this barn, ILVO has 6 gas exchange rooms to measure methane emission and a mechanically ventilated emission barn for the ammonia research in beef cattle.

