Incidence du point de prélèvement de l'air sur la mesure des émissions gazeuses en porcherie d'engraissement avec extraction basse selon deux modes de gestion des déjections

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Effect of the sampling point on gaseous emissions measure in pig house equipped with an under-floor air extraction

Gaseous concentrations were measured in two pig buildings equipped with under-floor air extraction. In the first building slurry was stored under the slatted floor (SM), whereas in the second, manure was removed each day (RM). In each piggery, air was sampled during the presence of the animals at two sampling points: the room area and the air ventilation duct. Gaseous concentrations were lower in the room area than in the ventilation duct by 31 and 28% for ammonia (NH_3), 8 and 80% for nitrous oxide (N_2O) and 11 and 39% for methane (CH_4) for RM and SM, respectively. With SM, under-floor air extraction leads to an important volatilization of N_2O and CH_4 compared to RM.