Test and validation

2025WP3_Sieplo_001
Status: Completed

Technical functionality

Problem Owner:
Sieplo B.V.

Involved:
Wageningen Research
Sieplo B.V.

A homogeneity trial with the Sieplo feed robot

Broad knowledge question

Can an autonomous feed robot mix and dose different feed rations homogeneously, so that animals receive a comparable ration across the feed fence when using the automatic feed robot FEEDR®?

Approach

At four moments, each three weeks apart, feed samples were taken at two farms, one calf farm and one goat farm. These feed samples were sieved and analysed using wet chemistry for dry matter, crude protein, starch and crude ash content.

Goal

To objectively determine how homogeneously the FEEDR® mixes and doses different feed rations in practice.

Results and reflection

In this trial, the calf ration was mixed considerably more homogeneously than the goat ration. In the goat ration, larger differences between samples were visible, probably because the ration was dosed less evenly.
The trial indicates that the performance of a feed robot depends on the ration and the dosing. For a next validation, clear threshold values for feed homogeneity and a standardised measurement method are needed.

The link to the evaluation report will be activated after publication
https://doi.org/10.18174/721536

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