

Recovery of Monotec in feed premixes

Objective

- To investigate the differences in recovery rates of coccidiostats in feed premixes.

Trial description

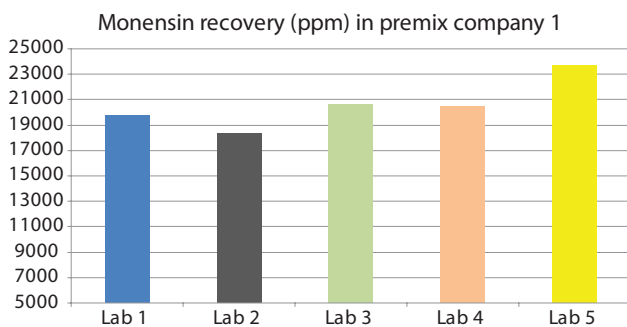
1 Set-up

- 3 commercial premix samples from different EU countries were sent to 5 different laboratories to analyze the Monotec (monensin) recovery (=Table 1).
- From the company with the lowest Monotec recovery rate, a blank premix was blended with 4 different Monotec concentrations and pelleted into poultry feed by a specialized facility (RDS, the Netherlands) (=Table 2).

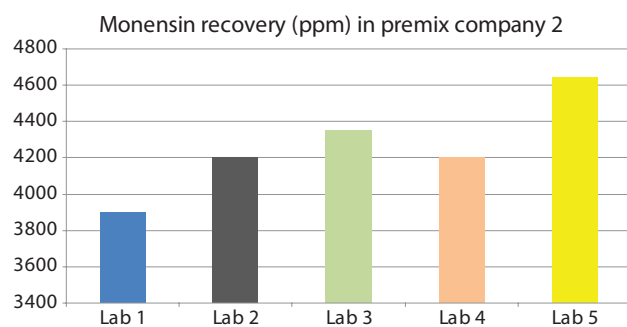
Results

Table 1: Recovery of Monotec in commercial premix samples

MONENSIN RECOVERY RATE (%)	PREMIX 1	PREMIX 2	PREMIX 3	AVERAGE
Lab 1	83	65	92	80
Lab 2	76	70	90	79
Lab 3	86	73	101	86
Lab 4	85	70	90	82
Lab 5	99	77	105	94
Average	86%	71%	96%	

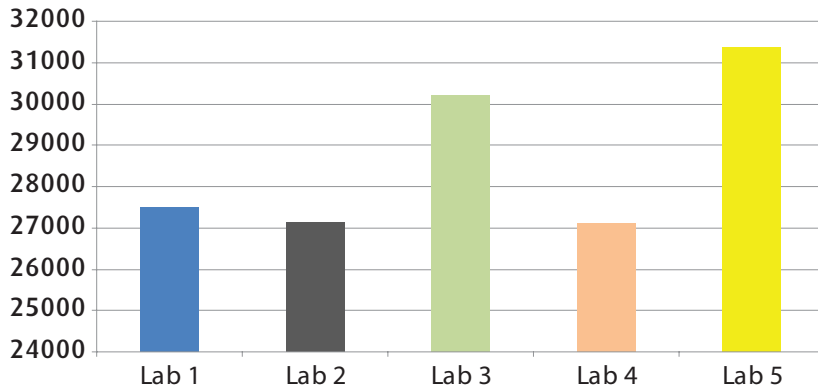


Expected value	24 000 ppm
Average	20 578
Recovery of	86 %



Expected value	6 000 ppm
Average	4259 ppm
Recovery of	71 %

Monensin recovery (ppm) in premix company 3



Expected value	30 000 ppm
Average	28 662 ppm
Recovery of	96 %

Table 2: Recovery of Monotec in premixes produced by Research Diet Services (RDS)*

MONENSIN CONCENTRATION (PPM)	LAB 1	LAB 2	LAB 3	LAB 4	LAB 5	AVERAGE (%)
6000	5800	5574.6	5600	5840	5943	96.5
10000	10430	9212.3	8920	10200	9670	97.4
20000	20020	17785.2	18500	20100	19297	96.4
30000	30590	26323.1	27600	29800	28375	95.9

* RDS is specialized in the production of pelleted research diets with very accurate mixing uniformity.

Conclusions

- Analyses of recovery of coccidiostats in feed and premixes must be evaluated carefully:
 - Differences in recovery rate at feed mill level can be avoided by implementation of correct mixing and sampling procedures.
 - Differences up to 15% between different laboratories in the recovery rate of coccidiostats in premixes can be found.
- Clear differences in monensin recovery rate between:
 - different premix companies
 - different laboratories
- Monotec** has, thanks to its **unique microgranulated formulation**, an **excellent monensin recovery** in premixes.