



WP3 Latvia

Comparison of calculator tool and lab results

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Farm info

- One farm calculated.
- Pig farm, slurry.
- 1362 slaughter pig places; 735 weaner places; 291 sow places.
- Unusal bedding for sows – glass fiber carpet, no data about it.
- Making their own feed, known total amount for each component of mixture.
- Water amount and feed data total amount per year, not per animal.
 - Feed per year split to animal per year proportionally to default data.
 - Water per year split to animal per year equally.

Survey data

											Calculated values (form		
Production level					Feed								
Weight gain			Weaned piglets		kg		DM		DM digestibility	Crude protein	P	K	
Starting weight	Final weight	Gain	Number per year	Piglet body weight at weaning, kg	gain	total	%	kg/year	%	g/kg			
kg					gain	total	%	kg/year	%				
30,0	110,0	80,0			8,2	623,4	87,8	547,4	84,5	180	4,6	6,7	
			25,2	8		1377,5	87,7	1207,6	81,8	153,8	5,3	6,0	
8,0	39,0	31,0			15,2	447,7	87,8	393,0	86,3	188	4,8	7,22	

Slaughter pigs (31 kg -110 kg)	Partially slatted floor (50-75%)
Sows (per year 31,4 piglets to 6,8 kg)	F + C Loose housing (partially slatted floor)
	L Farrowing pens (fully slatted floor)
Weaners (6,8 kg -31kg)	Drained and slatted floor (50/50)

Technological water	
Quantity	DM
t/animalyear	%
5,93	2,5
1,05	2,5
0,22	2,5
3,20	2,5

Results ex storage

Data source	DM	N	NH ₄ -N	P	K
	%	kg/t			
Calculation tool_default_ver_3_0.xlsx Default	5,5	7,3	5,5	1,4	0,8
Calculation tool_default_ver_3_0.xlsx Mass balance	3,8	2,01	0,70	0,44	0,26
Analysis results, Spring, Ex storage	3,88	1,10 (~1,1-4,4)	3,30	0,70	1,50
Analysis results, Summer, Ex storage (not yet entered in result database)	2,31	0,70 (~0,7-4,0)	3,30	0,48	1,33
National regulations	8,00	3,40	-	0,78	1,33

Conclusion

- Feeding data are detailed, but there are no data about bedding.
- Natural crust, in some cases add extra materials (straws) for cover – additional dry matter, nutrients.
- Calculator underestimates $\text{NH}_4\text{-N}$ content? In result database – 72 results for pigs, $\text{NH}_4\text{-N}$ to N ratio is about 0,7.

Comments

- Seperate entry data to new sheet. Hard to enter data and find all places were one should do it.
- What is purple cell color? What is red text color? What is green text color?
- Labeling hidden cells. Hard to follow calculations.

Thank You!