

Proficiency Testing Program
Organised by
Center for Laboratory Proficiency Testing
Department of Science Service,
Ministry of Higher Education, Science, Research and Innovation, Thailand
Minerals (Ca, Cu, Fe, Mg, Mn, K, Na, Zn and P) in Feeding stuffs
PTFF - FA02 - 2101
12 May 2021
SUMMARY SHEET

Laboratory Name : Technical Training and Support Service, Center for Scientific and Technological Equipment, Walailak University

Laboratory Code : FA02 - 2101 - 020

Test items	Number of results	Assigned value (X_{pt})	Standard deviation for proficiency assessment (σ_{pt})	Lab's result		z - score
				Value	MU	
Ca (g/100g)	51	1.002	0.100	0.930	-	-0.72
Cu (mg/kg)	36	143	14	144	-	0.07
Fe (mg/kg)	36	537	107	-	-	-
Mg (g/100g)	33	0.314	0.031	0.293	-	-0.68
Mn (mg/kg)	33	130	20	118	-	-0.60
K (g/100g)	32	0.901	0.135	0.794	-	-0.79
Na (g/100g)	32	0.209	0.023	0.223	-	0.61
Zn (mg/kg)	35	152	15	143	-	-0.60
P (g/100g)	46	0.661	0.079	0.609	-	-0.66


Note

- Assigned values (X_{pt}) are the robust averages of the participant results in this round, calculated by using Algorithm A (ISO 13528: 2015).
- Standard deviations for proficiency assessment (σ_{pt})
 - For Ca, Cu, Fe, Mg, Mn, K, Na and Zn: the target standard deviations by perception from expert judgement.
 - For P: the standard deviation is the target standard deviation by perception from the standard method (ISO 6491: 1998).
- MU are measurement uncertainties at 95% confidence level.
- Each z-score marked with "A" is an outlier ($|z| \geq 3.0$). Therefore, laboratory which is marked with "A" shall investigate the result. Laboratory is also encouraged to review the result which has an absolute z-score value between two and three ($2.0 < |z| < 3.0$) marked with "W".
- This summary sheet shall be read in conjunction with the final report.

Reported by


(Mrs. Chutima Wilaipun)
Program Coordinator

Approved by


(Mrs. Wannee Aupaiboon)
Head of Center for Laboratory Proficiency Testing
Department of Science Service