



**ORGANOCHLORINE PESTICIDE
RESIDUES IN GINSENG ROOT
PROFICIENCY TESTING
PROGRAMME**

APLAC T059

FINAL REPORT

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Summary of Results

1. The proficiency testing programme (APLAC T059) aimed at evaluating the testing capability of participants on the quantitative analysis of seven incurred organochlorine pesticide residues, namely α -, β -, γ - and δ -hexachlorocyclohexane (α -BHC, β -BHC, γ -BHC and δ -BHC), hexachlorobenzene (HCB), pentachloronitrobenzene (PNCB) and o,p'-dichlorodiphenyldichloroethylene (o,p'-DDE) in ginseng root.
2. A total of 55 laboratories from 17 different economies (TABLE I) enrolled in the programme and 50 of them returned their results to the organizer.
3. Consensus means and standard deviations (SD) of participants' data are respectively determined by robust statistic and the Horwitz Equation. z-Score is used as the numerical indicator to assess individual participant's competence relative to the others in the programme.
4. Results of participants are summarized as follows:

Performance Achieved	Number of Participants (Percentage)			
	α -BHC	β -BHC	γ -BHC	HCB
$ z \leq 2$	28 (58 %)	30 (64 %)	27 (57 %)	16 (39 %)
$2 < z < 3$	9 (19 %)	6 (13 %)	12 (26 %)	15 (37 %)
$ z \geq 3$	11 (23 %)	11 (23 %)	8 (17 %)	10 (24 %)
Total:	48 (100 %)	47 (100 %)	47 (100 %)	41 (100 %)

Note: The spread of participants' reported results for δ -BHC and PNCB is very wide (RSD of 76.3 % and 76.7 % respectively) and no detectable amount of o,p'-DDE was found in the sample during the homogeneity study using a test method with a method detection limit of 2 g/kg. Hence, no performance assessment is performed for these three pesticides.