



Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments

Report of AOSA Referee 2017: *Brassica carinata* method

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Canada

Aim

To provide N. American laboratories the opportunity to experience the new **ISTA** method for *Brassica carinata* germination

Added to the ISTA Rules in 2017, effective 1 January 2018

Method

- 400 pure seeds
 - BP (folded paper or rolled towel)
 - Constant 20°C or alternating 20 \rightleftharpoons 30°C
 - Six seed lots
 - 15 laboratories (12 both temperatures)
 - includes 4 from the ISTA validation study
- Results analysed using new ISTA method

Results

AOSA referee all laboratories

Method	$\bar{p}_{...}$	S_r	f_r	S_R	$\sqrt{\hat{\sigma}_{Lab}^2}$	$\sqrt{\hat{\sigma}_{Lot \times Lab}^2}$
20<=>30°C	87	3.36	1.00	5.10	3.25	2.03
20°C	88	3.32	1.00	4.59	2.37	2.11

From ISTA validation study

Method	$\bar{p}_{...}$	S_r	f_r	S_R	$\sqrt{\hat{\sigma}_{Lab}^2}$	$\sqrt{\hat{\sigma}_{Lot \times Lab}^2}$
20<=>30°C	92	2.92	1.06	3.58	1.09	1.77
20°C	92	2.61	0.98	3.53	1.59	1.77

S_r repeatability standard-deviation

S_R reproducibility standard-deviation

Summary

✓ Referee successful

It gave laboratories the chance to try the new method

Also found:

- Similar results to ISTA validation study
- 20°C has the better reproducibility
- But no reason to exclude $20 \leq 30$ °C
- Less variation with experienced laboratories but all laboratories were within acceptable values
- New ISTA statistical method worked well

Thanks and questions?

THANK YOU

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