

PTC short report 2018

Proficiency Test Committee members

PT co Coordinator (B. Opra)

Presentation Didier Demilly as PTC Chair



The goals of the ISTA PT

- To develop & evaluate the technical performance of laboratories (**members and non-members**)
- To monitor the technical performance of ISTA accredited labs (**accredited members**)
- To identify the training needs and compare ISTA methods (**ISTA TCOMs**)
- **Standard PT tests:** PUR, OSD, GER, MOI, TZ, VIG, issuing OIC, TSW expected in 2021



Achieving the goals

PTC Members

- Christian Boehm DK
- Sarah Dammen US
- Sharon Davidson US
- Gillian McLaren UK
- Sergio Pasquini IT
- Zita Ripka HU
- Ruoqing Wang CA
- Rita Zecchinelli IT
- Didier Demilly FR

ISTA Secretariat

New PT Co-Ordinator as Observer,
Branka (Branislava Opra)

New members

- Suzanne Andersen DK
- Pernilla Andersson SE
- Monika Holubicová SK

Members leaving the PTC

- Andrea Jonitz DE
- Mari Jürman EE
- Dot Vittrup Pederson DK
- Benno Voit DE

TCOM

Collaboration exchanges (programme plan, follow actions, questions), statistics



Proficiency Test Programme Plan 2017-2019

Proficiency Test Programme Plan 2017-2019 approved at the ISTA Congress 2016 and updated June 2018

Round	Species	Test round scope	Representative species	PT Committee (PT leaders)	Status
17-1	Festuca arundinacea	PUR, OSD, GER	Grasses	Ruojing Wang	Completed
	Seed MIX	Training purpose, not subjected to ratings		Günter Müller	
	Brassica napus	Vigour (Radical emergence test)		Gillian McLaren	
17-2	Trifolium repens	PUR, OSD, GER, MOI	Small legumes	Christian Boehm	Completed
17-3	Lolium perenne	PUR, OSD, GER, TZ, OIC	Grasses	Dot Vittrup Pedersen	Completed
	Gypsophila elegans	GER	Flower seed	Zita Ripka	Completed
	Abies alba	GER	Tree seed	Sergio Pasquini	Completed
18-1	Lupinus angustifolius	GER, MOI	Pulses	Günter Müller	Completed
	Beta vulgaris (Coated Seed)	GER;OIC	Other agricultural species	Didier Demilly	Results & Ranking withdraw
18-2	Daucus carota	PUR, OSD, GER,	Vegetables	Sharon Davidson	Completed
18-3	Oryza sativa	PUR, OSD, GER, OIC	Cereals	Rita Zecchinelli	Completed
19-1	Galega orientalis	PUR, OSD, GER; MOI	Small legumes	Mari Jürman	Deadline 15 July 2019 Shipments, aug. dec.
19-2	Brassica napus	PUR, OSD, GER;TZ	Other agricultural species	Andrea Jonitz	
19-3	Hordeum vulgare	PUR, OSD, GER, TZ	Cereals	Sarah Dammen	

Sharon Davidson and Benno Voit - Test leaders in reserve
 Additional Mini PTs : Triticum aestivum, Zea mays (2017) ; Daucus carota (2019)



Production and Publications

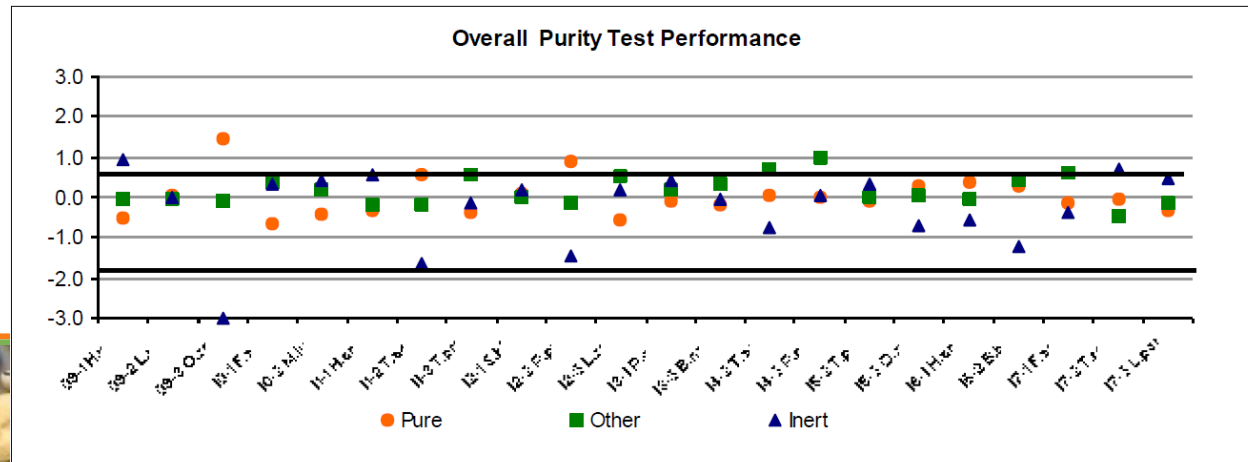
- PTs preparations 2018 : 4 Test Leaders, 3090 samples, 4 heterogeneity tests, 13 000 seeds added in samples for OSD
- Statistical analysis for 1774 results and individual reports (provisional and final) sent from ISTA secretariat to laboratories
- 4 PTs reports issued (available on line on ISTA website)
- Answering questions follow up action, complaints, circulating information within PTC or with ISTA Secretariat and other Technical committees : 1250 E-mails in 2018 (+21%)
- Annual PTC report and annual meeting report



Specific issues in 2018

- 3 major **follow up actions** after complaints
- **PT17-2 *Trifolium repens* Purity** : No statistical effect of insect damage seeds (JL Laffont conclusion)
- **PT17-3 *Gypsophila elegans* Germination**,
 - 43 accredited laboratories used 20°C and 7 acc lab used 15°C, temperature effect at 15°C was suspected,
 - New analysis and investigations were made on heterogeneity test and QA samples,
 - No statistical effect of temperature was found (JL laffont conclusion)
- For some reports, **thresholds bars for overall performance** were not correctly positioned at +1 and -1.

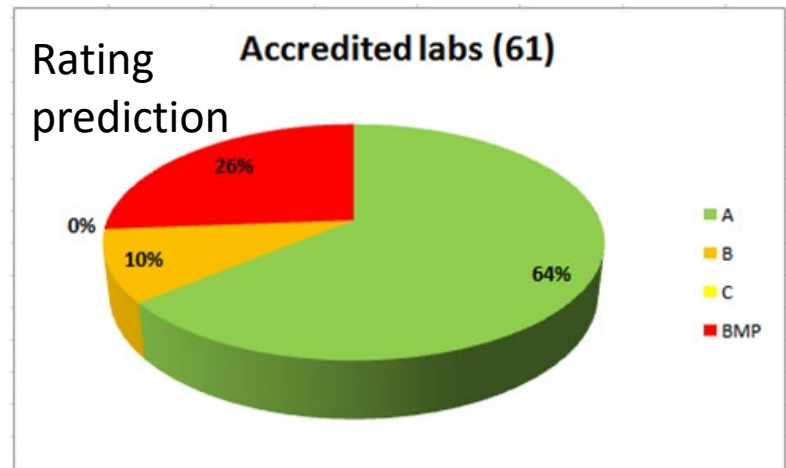
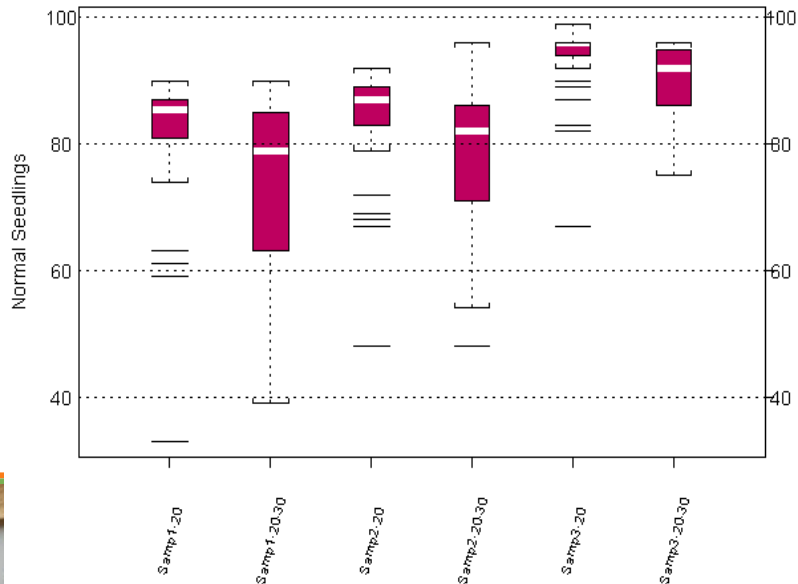
This was corrected in May 2018.



Specifics issues in 2018

- **PT 18-1 *Beta vulgaris* (pelleted seeds) – Germination :**
- Exceptional statistical analysis, JL Laffont conclusions
 - mixing of different temperatures which are not equivalent in terms of performance,
 - this species as pelleted would require additional validation.
- **Consequently : No rating has been applied for this PT**

18.B vul - Accredited labs only



Specifics issues in 2018

- New validation step after statistical analysis and before sending results to laboratories
- PT19-1 *Galega orientalis* special instruction : « NOT perform any pre-treatment to remove the hardseedness”, to prevent high variability on normal seedling percentages
- OSD : *Petroselinum crispum* in *Daucus carota* with a low retrieval and identification rate (42.3%)
- Germination method : One noticeable effect

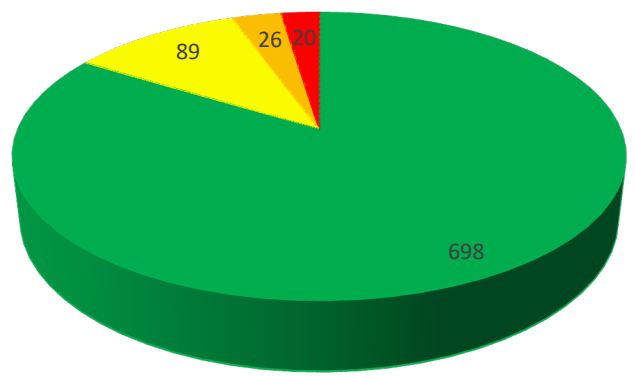
Daucus carota,
 better germination
 with $20 \leq 30^{\circ}\text{C}$

	Lot 1	Lot 2	Lot 3	Acc labs number
20°C	94.5	91.3	87.9	26
20<=>30°C	95.6	92.8	88.7	74
Difference	1.1	1.5	0.8	
	Mean			1.1



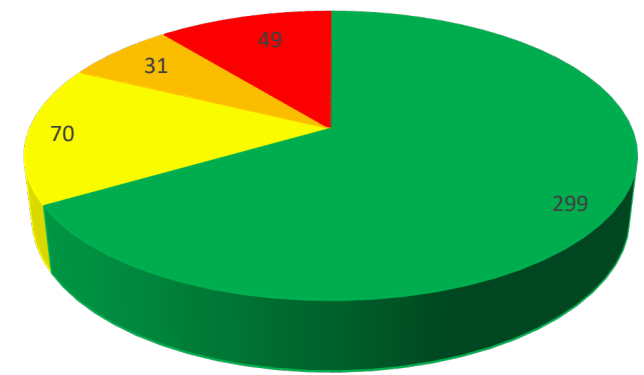
2018 – All PTs, All tests ranking results

ACCredited laboratories - 833
 Participations
 A=78% (=) ; A+B = 95% (+2)



■ A ■ B ■ C ■ BMP

NON ACCredited laboratories - 449
 Participations
 A=67% (+16) ; A+B = 83% (+12)



■ A ■ B ■ C ■ BMP



Prospect – 2020-2022

Programme plan

Year	PT num	Species	Tests	Group
2020	PT20-1	<i>Phaseolus vulgaris</i>	GER, VIG (conductivity), MOI	4
2020	PT20-2	<i>Allium porum</i>	PUR, OSD, GER, TZ, TSW	6
2020	PT20-3	<i>Festuca pratensis</i>	PUR, OSD, GER, OIC	1
2020	PT20-3	<i>Felicia sp.</i>	GER	8
2021	PT21-1	<i>Zea mays</i>	GER, VIG (radicle emergence), MOI	2
2021	PT21-1	<i>Ulmus sp.</i>	GER, TZ	7
2021	PT21-2	<i>Medicago sativa</i>	PUR, OSD, GER, TZ, OIC, TSW	3
2021	PT21-3	<i>Fagopyrum esculentum</i>	PUR, OSD, GER	5
2022	PT22-1	<i>Glycine max</i>	GER	4
2022	PT22-2	<i>Spinacia oleracea</i>	PUR, OSD, GER	6
2022	PT22-3	<i>Lolium perenne</i>	PUR, OSD, MOI, TZ, OIC	1



- New members/test leaders, expert in seed sampling and seed testing are welcome to the PTC,
- Many thanks to PTC members/PT leaders, ISTA secretariat & Technical committees,
- Special thanks for Andrea Jonitz, Mari Jürman, Dot Vittrup Pederson, Benno Voit



Thank You
for your Attention!

