



## INTERNATIONAL SEED TESTING ASSOCIATION (ISTA)

Secretariat, Zürichstrasse 50, 8303 Bassersdorf, CH-Switzerland

Phone: +41-44-838 60 00, Fax: +41-44-838 60 01, Email: [ista.office@ista.ch](mailto:ista.office@ista.ch), <http://www.seedtest.org>

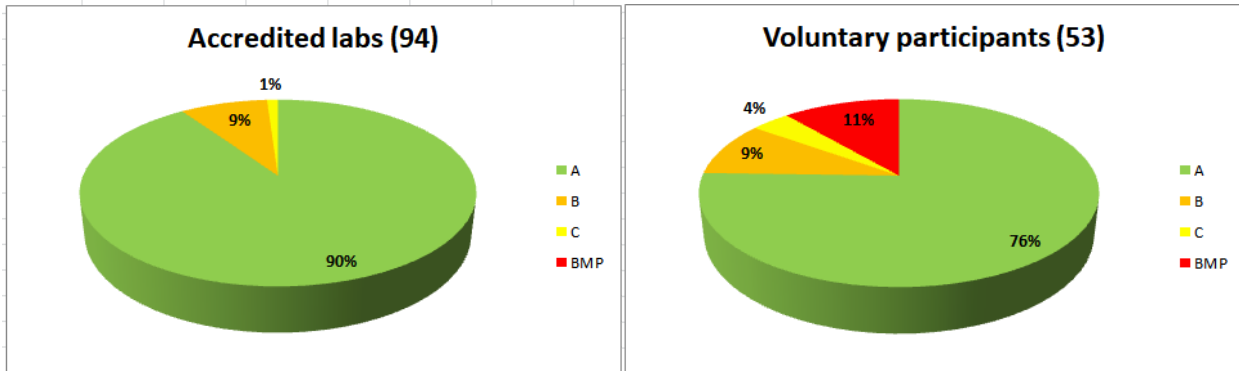
### Summary results: PT 19-1 G.ori

Species: *Galega orientalis*

Scope: PUR, OSD, GER, MOI

### PURITY Ratings

Total number of participants = 147



### Means and Standard Deviation

of the obligatory accredited participants  
calculated for the category of pure seed

<u>Categories</u>	<u>Mean Values %</u>			<u>Standard Deviation</u>		
	Lot 1	Lot 2	Lot3	Lot 1	Lot 2	Lot 3
Pure seed	99.8	99.8	99.6	0.10	0.10	0.13
Other seed	0.1	0.0	0.4	-	-	-
Inert matter	0.1	0.2	0.0	-	-	-



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### Z-score Distribution



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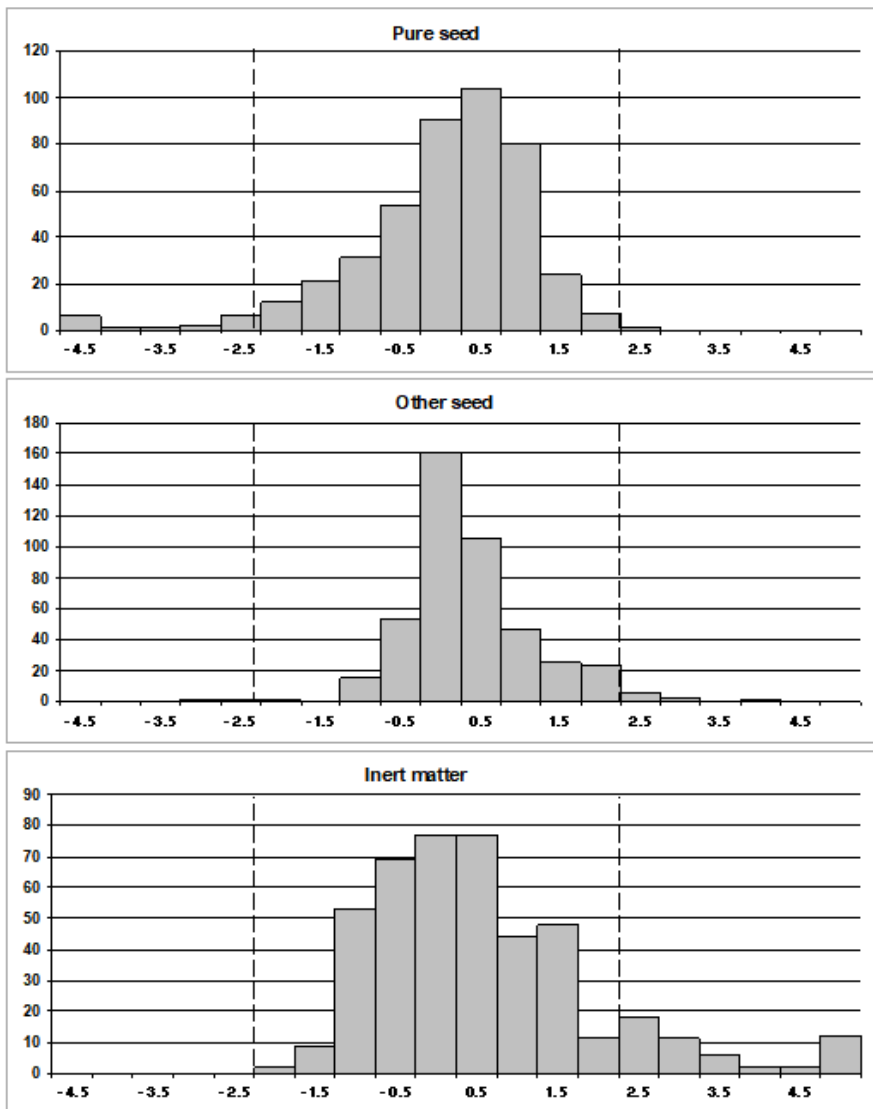
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#### Proficiency Test Report – Test Round 19-1 G.ori

**Species :** Galega orientalis

**Scope:** Purity

The following histograms show the frequency distributions of all participants Z-Scores for the relevant components, i.e. **Pure seed** and **Inert matter** and **Other seed**. The Z-Scores from all three samples are included in each histogram. For further explanations, please refer to the document 'The ISTA Proficiency Test Programme'





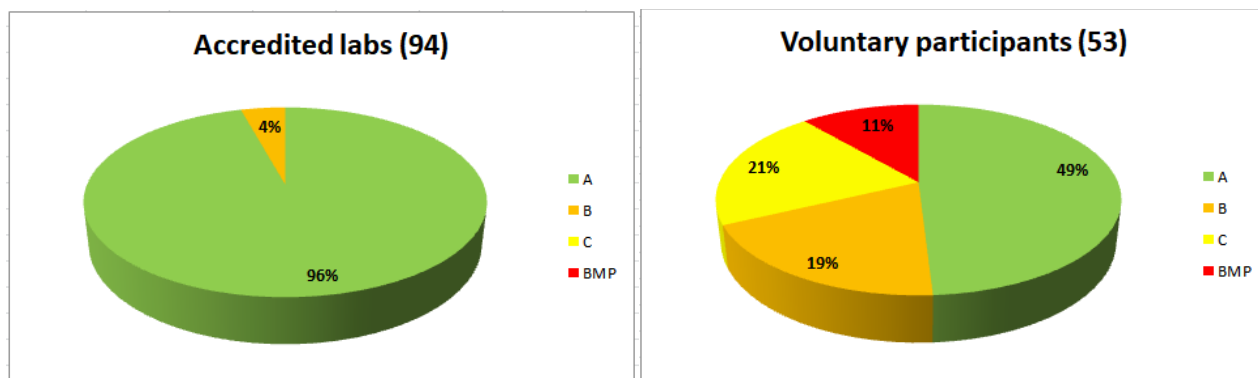
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### OSD Ratings

Total number of participants = 147



### Retrieval rates

**Proficiency Test Report - Test round** 19-1 G.ori

**Species:** *Galega orientalis*

**Scope:** Other Seed Determination

#### Average of seeds retrieved and identified correctly

The following table shows the retrieval rates of each species added by the test leader prior to sample dispatch. Every species that was added is assigned a value based on the actual retrieval rate of all seeds added. Thresholds are as follows:

- >=90 % -> 3
- >=85 % -> 2
- <85 % -> 1

This score is multiplied with the number of seeds your laboratory reported and identified correctly. The percentage of retrieved and identified seeds is then determined and does define the in-round rating. The thresholds are as follows:

- >=90 % -> A
- >=80 % -> B
- >=70 % -> C
- <70 % -> BMP

For further details please refer to the document: "The ISTA Proficiency Test Programme".

Lot #	Species name	# of seeds added	Average # of seeds found	Retrieval rate [%]	Assigned value
Lot 1	1 <i>Anthemis arvensis</i>	2	1.8	89.2	2
	2 <i>Lotus corniculatus</i>	3	2.5	82.2	1
	3 <i>Melilotus albus</i>	5	4.1	81.8	1
Lot 2	1 <i>Barbarea vulgaris</i>	3	2.5	83.9	1
	2 <i>Trifolium repens</i>	4	3.6	89.8	2
	3 <i>Tripleurospermum inodorum</i>	3	2.6	87.9	2
Lot 3	1 <i>Alopecurus myosuroides</i>	2	1.8	90.4	3
	2 <i>Medicago lupulina</i>	2	1.7	85.7	2
	3 <i>Silybum marianum</i>	4	3.4	84.9	1
	4 <i>Stellaria graminea</i>	4	3.4	85.4	2



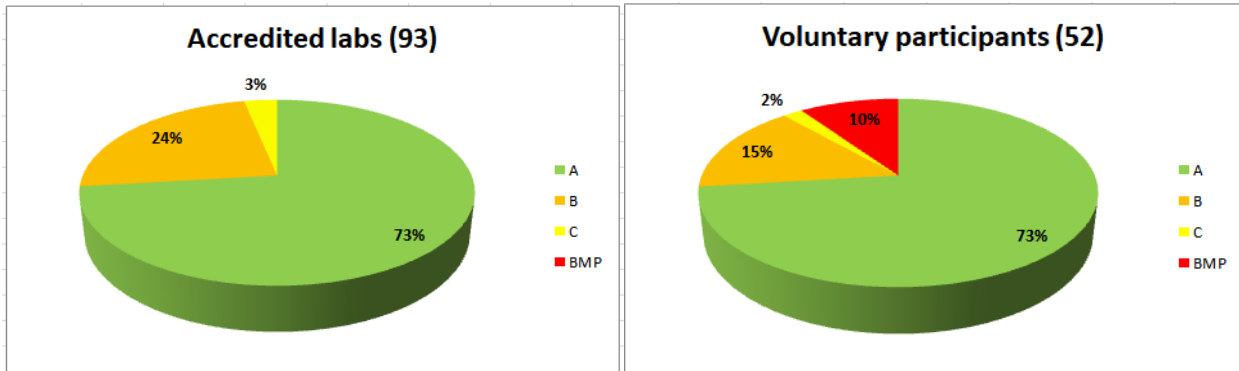
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### GERMINATION Ratings

Total number of participants = 145



### Means and Standard Deviation

of the obligatory accredited participants  
calculated for the category of normal seedlings

Categories	Mean Values %			Standard Deviation		
	Lot 1	Lot 2	Lot 3	Lot 1	Lot 2	Lot 3
Normal seedlings	30	63	28	5.25	2.57	2.27
Abnormal seedlings	10	2	3	-	-	-
Non-germinated seed	60	35	69	-	-	-

### Method used

overview for all participants  
presented for the temperature, substrate and pretreatment

Temperature °C	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
20<=>30*	1	1	2
20	92	48	140
Not reported		3	

\*Temperature used is not according to the ISTA Rules



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Substrate	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
<b>BP</b>	30	17	<b>47</b>
<b>TP</b>	45	31	<b>76</b>
<b>S</b>	1	0	<b>1</b>
<b>PP</b>	17	4	<b>21</b>

Pretreatment	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
<b>No Treatment</b>	93	52	<b>145</b>



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### Z-score Distribution



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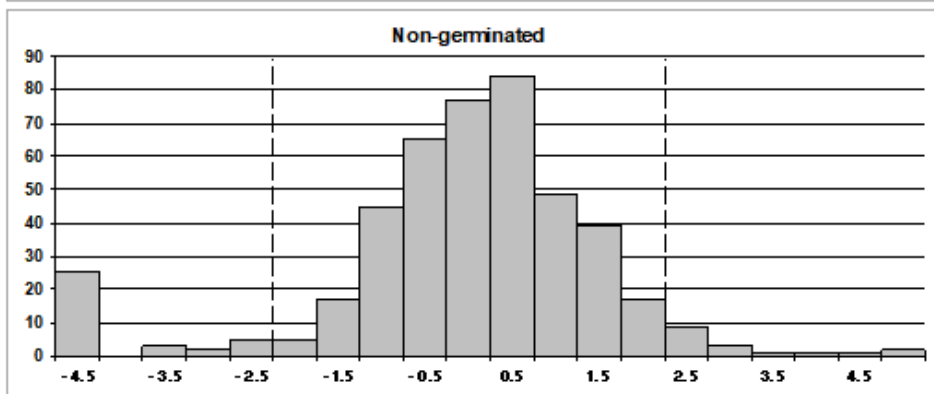
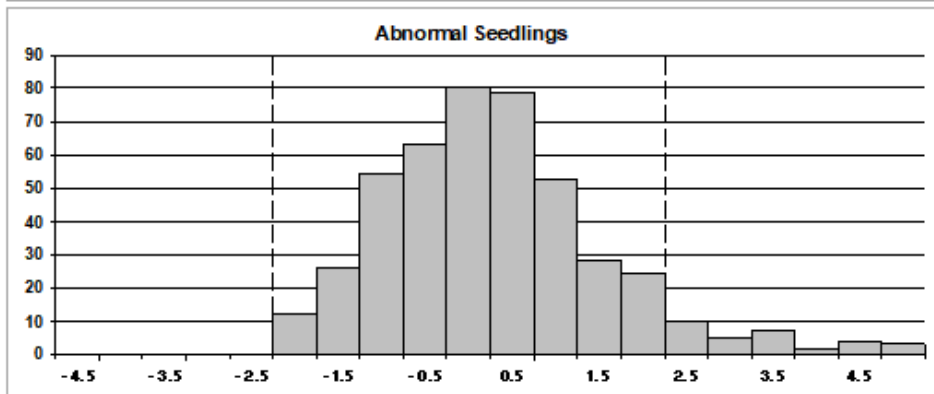
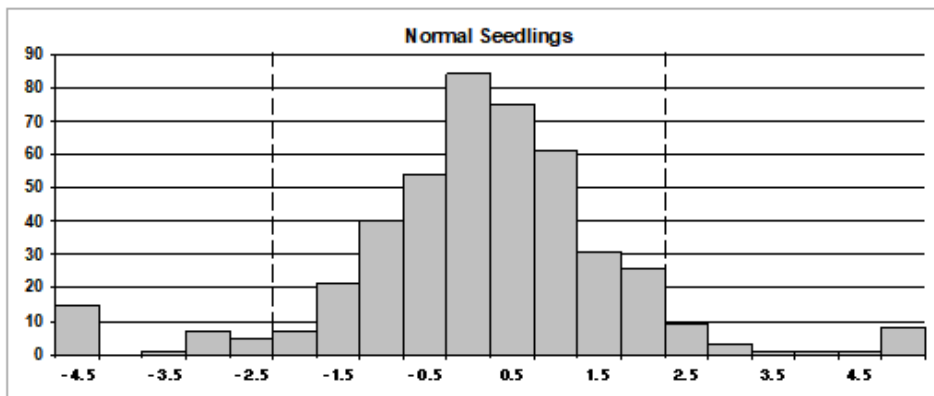
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### Proficiency Test Report – Test Round 19-1 G.ori

Species : *Galega orientalis*

Scope: Germination

The following histograms show the frequency distributions of all participants Z-Scores for the relevant components, i.e. **Normal** and **Abnormal Seedlings** and **Non-germinated Seeds**. The Z-Scores from all three samples are included in each histogram. For further explanations, please refer to the document 'The ISTA Proficiency Test Programme'





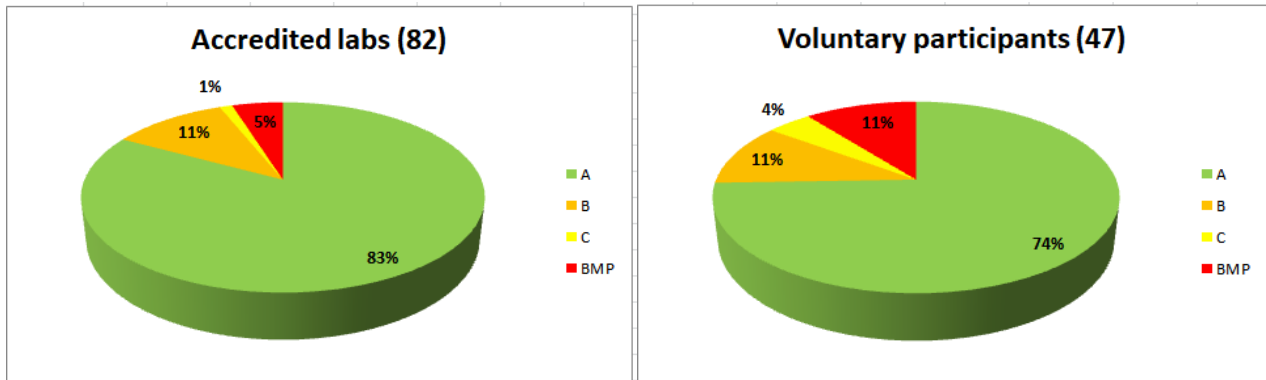
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### MOISTURE Ratings

Total number of participants = 129



### Means and Standard Deviation

of the obligatory accredited participants

Categories	Mean Values %			Standard Deviation		
	Lot 1	Lot 2	Lot3	Lot 1	Lot 2	Lot 3
Moisture	6.37	6.09	6.01	0.33	0.34	0.33

### Method used

overview for all participants

Method	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
130°, 1h no grinding	82	46	128
103°, 17h no grinding		1	1



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### Proficiency Test Report – Test Round 19-1 G.ori

**Species :** Galega orientalis

**Scope:** Moisture

The following histogram shows the frequency distributions of all participants Z-Scores for the moisture test. The Z-Scores from all three samples are included in each histogram. For further explanations, please refer to the document 'The ISTA Proficiency Test Programme'.

