



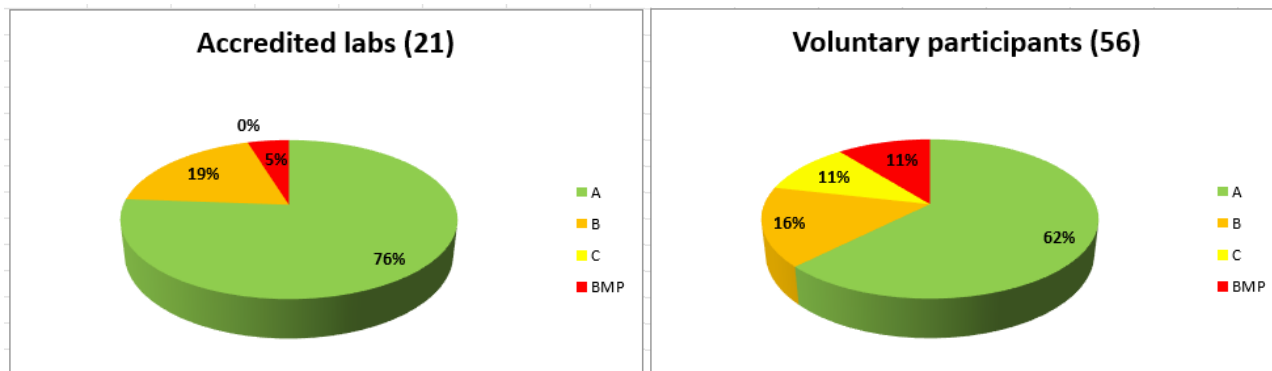
Summary report: PT 25-3 P.syl

Species: *Pinus sylvestris*

Scope: GER, VIA (TZ test)

GERMINATION Ratings

Total number of participants = 77



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	79	85	88	5.27	2.63	2.80
Abnormal seedlings	5	5	3	-	-	-
Non-germinated seed	16	10	9	-	-	-

Method used

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

Temperature °C	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
20↔30	20	44	64
20*	1	12	13

* Less desirable temperature

Substrate	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
TP	17	45	62
BP	1	1	2
PP	3	8	11
Not stated		2	2

Pretreatment	# Users		# Users TOTAL
	Accredited labs	Voluntary participants	
No Treatment	15	40	55
Prechill *	6	11	17
light / H ₂ O		4	4
Not stated		1	1

* Prechill was not recommended for samples that are not from eastern provenances

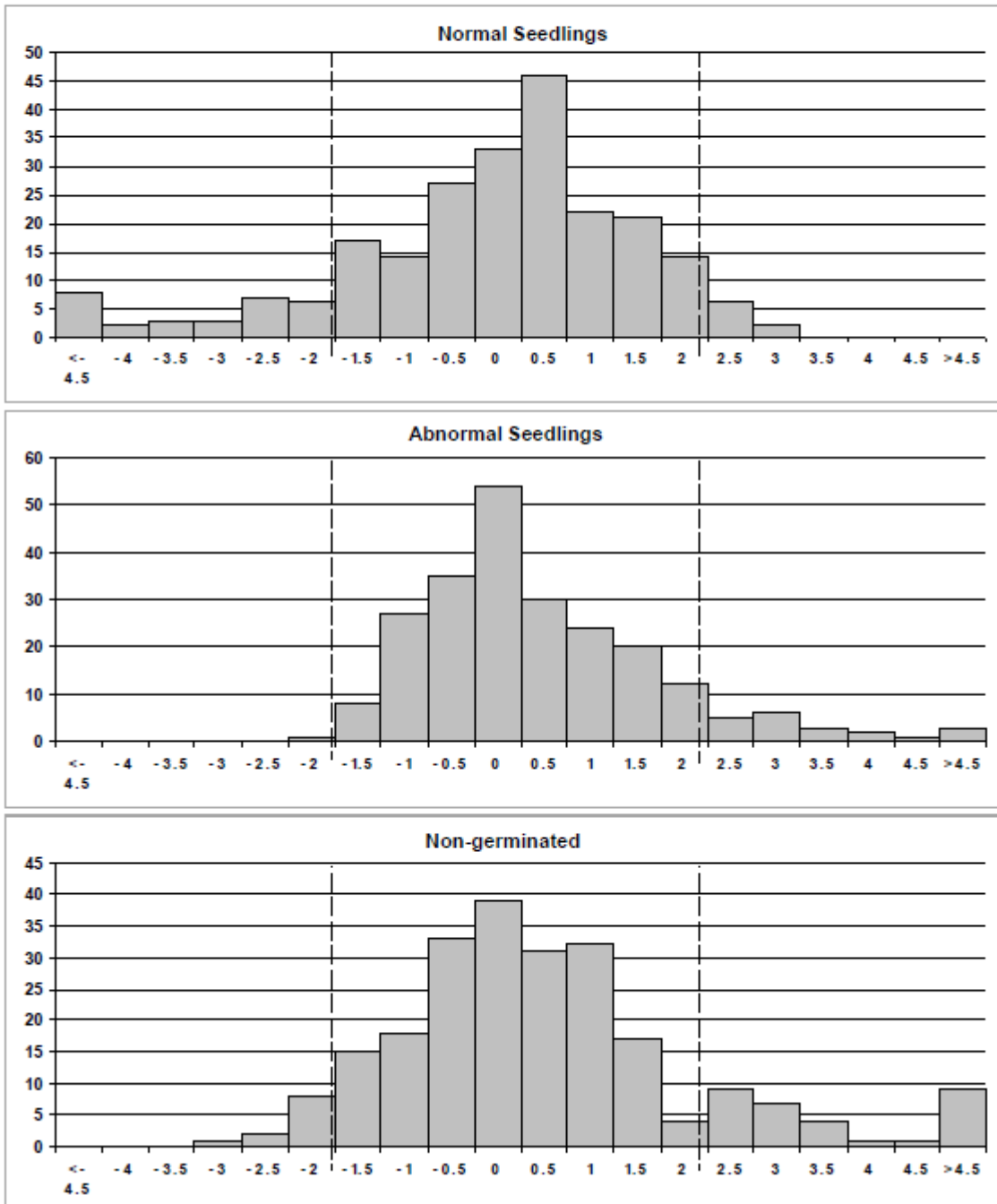
Z-score Distribution

Proficiency Test Report – Test Round 25-3 P.syl

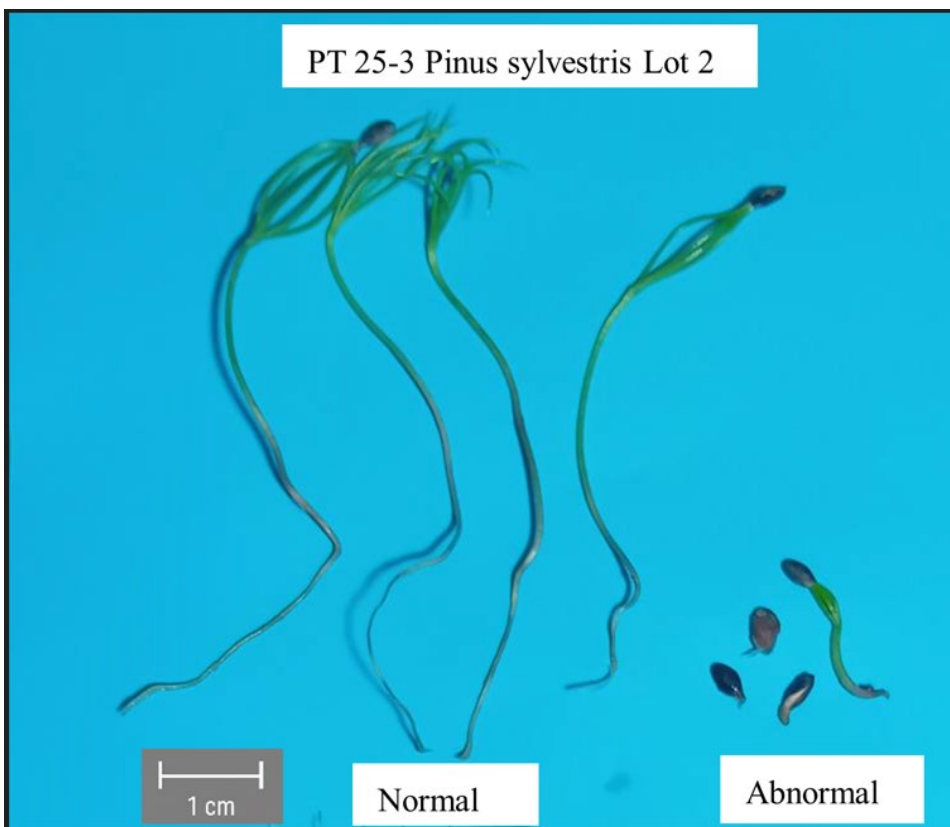
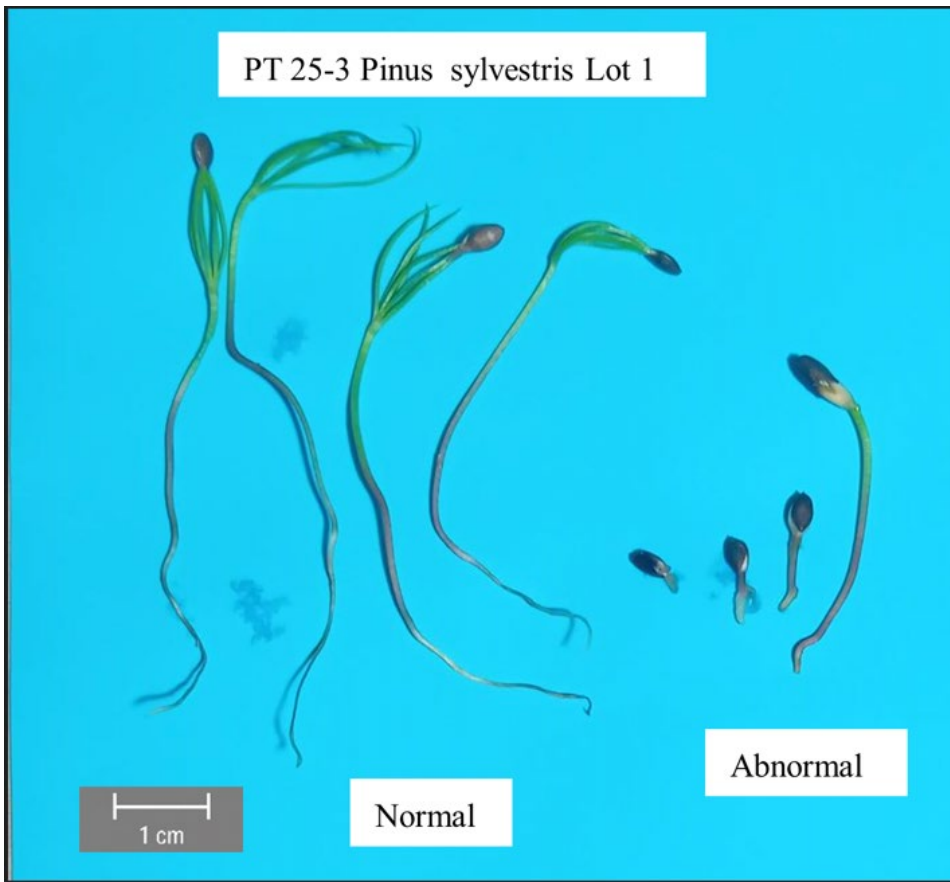
Species : Pinus sylvestris

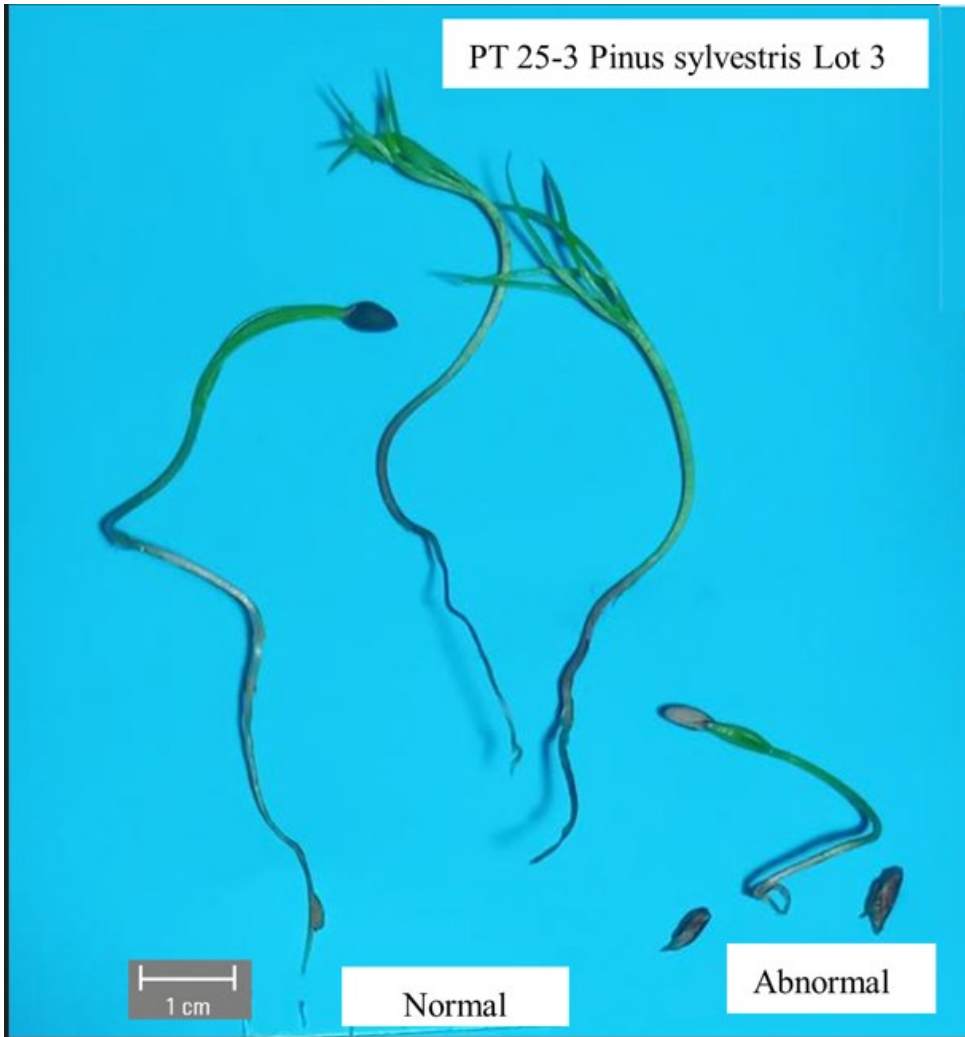
Scope: Germination

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'



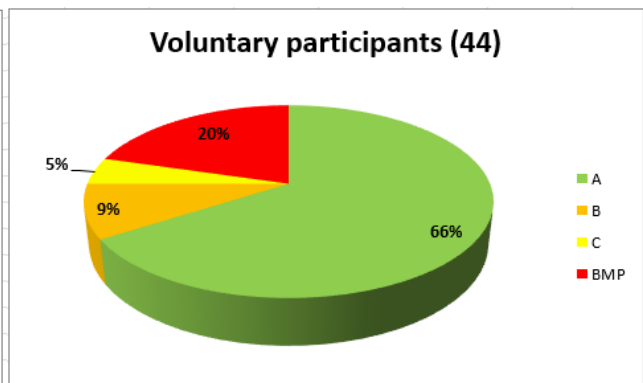
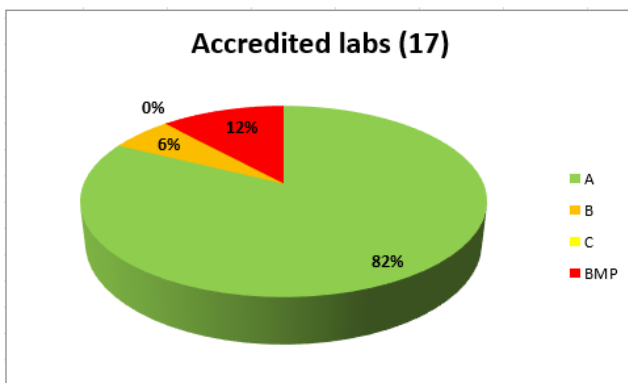
Images of normal and abnormal seedlings





VIABILITY TEST (TZ test) Ratings

Total number of participants = 61



Means and Standard Deviation

of the obligatory accredited participants

<u>Categories</u>	<u>Mean Values %</u>			<u>Standard Deviation</u>		
	Lot 1	Lot 2	Lot3	Lot 1	Lot 2	Lot 3
Viable seed	93	94	93	3.88	2.85	3.60

Method used

overview for all participants

<u>Method</u>	<u># Users</u>		<u># Users TOTAL</u>
	<u>Accredited labs</u>	<u>Voluntary participants</u>	
Transversal cut 1% solution, 30°C; 18h staining	12	26	38
Transversal cut Different prep parameters*	1	5	6
Longitudinal cut 1% solution, 30°C; 18h staining	3	8	11
Longitudinal cut Different prep parameters*	1	4	5
Removal of the seed coat*		1	1

* these preparation methods differ from the methods proposed in the ISTA Rules

Z-score Distribution

Proficiency Test Report – Test Round 25-3 P.syl

Species : *Pinus sylvestris*

Scope: Tetrazolium

The following histogram shows the frequency distributions of all participants Z-Scores for the viability 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'.

