

# Understanding Lefroy Valley Anniversary Test Results



I.S.T.A lab classifications			Lefroy Valley Classifications		
	Definition			Definition	
	First count	Final Count		First count	Final count
<b>Normal seedlings</b>	Intact seedlings displaying a well developed root-system, well developed shoot axis and healthy cotyledons. <b>Only seedlings displaying these characteristics are counted</b> and removed from the test at the first count. All other seedlings/seed is left to be analysed at the final count	Intact seedlings displaying a well developed root-system, well developed shoot axis and healthy cotyledons; Or seedlings with slight defects, eg. Less than ½ of cotyledons necrotic, primary root with limited damage or slight growth retardation.	<b>Good seedlings</b>	Intact seedlings displaying a well developed root-system, well developed shoot axis and healthy cotyledons. <b>Only seedlings displaying these characteristics are removed from the test at the first count. All other seedlings/seed is left on the substrate until the final count</b>	Intact seedlings displaying a well developed root-system, well developed shoot axis and healthy cotyledons
			<b>Acceptable seedlings</b>	If few or no Good seedlings are present at the first count then seedlings may be categorised as "Acceptable". At the first count these are seedlings that appear to be "Good" but are not yet fully developed to allow assessment.	Seedlings with slight defects eg. Less than ½ of cotyledons necrotic, primary root with limited damage or slight growth retardation; Or seedlings slightly slower than those categorised as "Good".
				<b>Slow seedlings</b>	If few or no Good or Acceptable seedlings are present at the first count then seedlings may be categorised as "Slow". These seedlings have just sprouted and typically only have a root emerging from the seed coat.
<b>Abnormal seedlings</b>	<i>Not analysed at first count</i>	Seedlings which lack the potential to grow into a normal plant. Eg. Primary and/or secondary roots missing, decayed as a result of primary infection, cotyledons missing	<b>Abnormal seedlings</b>	<i>Not analysed at first count</i>	Seedlings which lack the potential to grow into a normal plant. Eg. Primary and/or secondary roots missing, decayed as a result of primary infection, cotyledons missing
<b>Fresh ungerminated seed (FUG)</b>	<i>Not analysed at first count</i>	A seed able to imbibe water but the germination process is blocked. These seeds have the potential to grow into normal seedlings at a later date.	<b>Fresh ungerminated seed (FUG)</b>	<i>Not analysed at first count</i>	A seed able to imbibe water but the germination process is blocked. These seeds have the potential to grow into normal seedlings at a later date.
<b>Dead Seed</b>	<i>Not analysed at first count</i>	Seeds which at the end of the test period are neither hard nor fresh nor have produced any part of a seedling.	<b>Dead Seed</b>	<i>Not analysed at first count</i>	Seeds which at the end of the test period are neither hard nor fresh nor have produced any part of a seedling.
<b>Hard Seed</b>	<i>Not analysed at first count</i>	Seeds which remain hard at the end of a test because they have not absorbed water	<b>Hard Seed</b>	<i>Not analysed at first count</i>	Seeds which remain hard at the end of a test because they have not absorbed water