

ColdNSure test for Pseudotsuga seedlings

Valid for Douglas fir

The general conditions of sales of NSure apply to this product. The ColdNSure Test is only intended for the analysis of Douglas fir seedlings (*Pseudotsuga menziesii*) of 1 or 2 years old in the period that they are developing cold hardiness. It is the responsibility of the user to make a representative selection of the seedlings, to sample the correct variety, to accurately apply the codes and to take care of a correct execution of the sampling protocol.



The ColdNSure test can be used for accurately determining the cold hardiness of Douglas fir seedlings. ColdNSure can be applied for:

1. accurate monitoring of cold hardiness development;
2. determination for the optimal moment for cold storage;
3. determination of the optimal moment for lifting.

The result of the test is a classification in one of three cold tolerance stages: cold sensitive, developing cold tolerance and full cold tolerance. Based on 1 sample NSure is able to determine the actual cold tolerance stage, for instance to be used for comparing batches and as decision support for storage planning. The measurement will become more reliable when several samples are analysed during the hardening process. In addition this will allow prediction of the time point when full cold tolerance will be reached.

The test result

You will receive a confirmation as soon as the samples have arrived. Within 2 working days after receipt of your samples, we will send you the analysis result by email or fax. On request we can deliver your analysis result within 24 hours. In this case, mark the URGENT block when logging in your samples or on the sample description form. A 15% fee applies.

Content of the kit per sample

Sampling card (1)	FTA© Micro Card with a black circle in which the juice sample must be applied (© FTA technology is a trademark of Whatman)
Extraction vial (1)	Plastic vial containing extraction fluid. Not for consumption, MSDS available on request
Pipette (1)	To apply the sample on the sample card
Pestle (1)	For grinding of the plant tissue
Sealable bag (1)	Sealable bag with a package of drying agent, for storage of the dry sample card
Coded stickers (1 x 2)	Coded stickers in duplicate for sample identification
Sample information form (1)	Form to describe the sample
Return envelope (1)	In which to return the sample card

Storage directions: Preserve all components at room temperature, dry and in the dark.
