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Image created in Hannover, Germany

Micrografting — A Time Saver!

Semi-Finalist

My current research project focuses on transformation, efficacy, and environmental biosafety of transgenic disease-resistant peas. During course of my PhD here at UA, I spent a semester at University of Hannover, Germany as an exchange research student in winter 2013, learning how transgenic plants were made. This picture describes the important step after rescuing potential transgenic plant from selection media; it is carefully micro-grafted on a rootstock to speed up the regeneration process saving the year's worth of time needed otherwise to get them growing and setting seed. This crucial step renders a better established and acclimatized transgenic plant. This particular part of my research work has led to introduction of drought tolerance traits into Canadian pea lines that were taken to Germany. We now have third generation drought resistant seeds with stable drought tolerant trait.