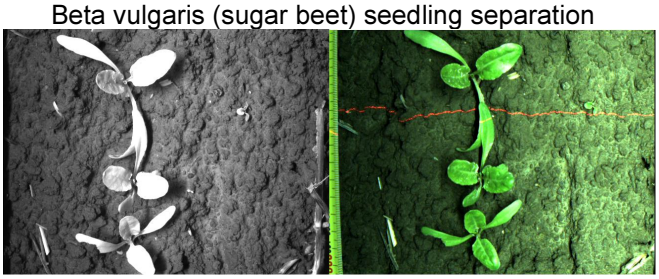
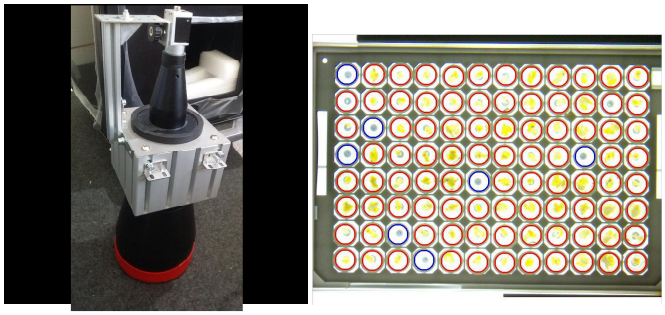
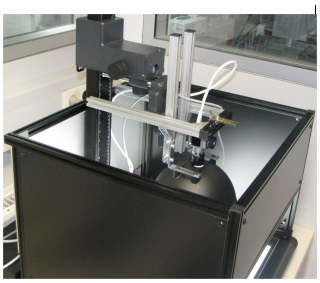
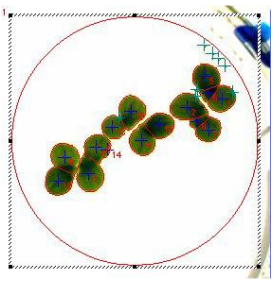
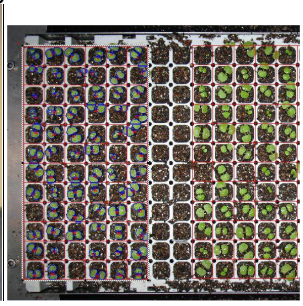
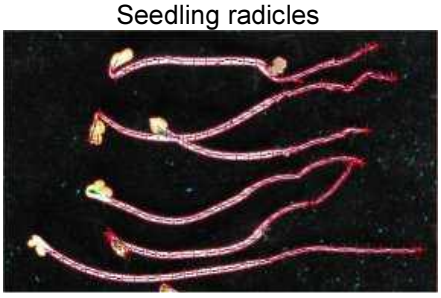
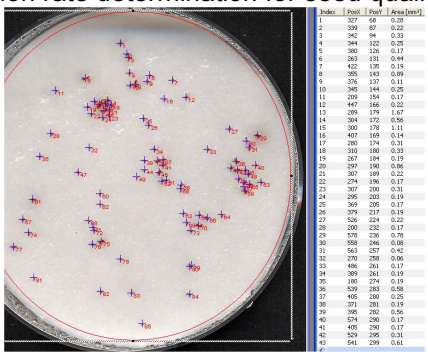
medeaLAB Crop Science Applications

in research and industry

The medeaLAB Imaging Systems are products of Medea AV Multimedia & Software GmbH, founded in 1997 by the biologists **Christian Kühnel-Kratz** and **PhD sc. Kurt Vogel**. Our Vision Systems are based on more than 20 years of experience in digital image analysis.

Branch	Application	Methods
Agriculture	Beta vulgaris (sugar beet) seedling separation 	Laser line profile for height measurement and NIR imaging for plant detection
Molecular genetics	DNA sequencing of plant tissue samples 	Detection of small samples in tube racks using large telecentric optics

Ecotoxicology	  Lemna minor (duckweed) growth inhibition test	Leaf count and classification of bleaching
Plant breeding	TrayScan – Mobile device for efficient evaluation of trays in glass houses 	Detection of seedlings growth
Plant physiology research	Seedling radicles 	Root length measurement
Seed manufacturing	Germination rate determination for seed quality control 	Classification of germination state
Marine research	Long-term measurements of marine algae	Time series analysis and determination of growth rates