

8th July 2019, Angers France INVITE H2020 project invites you to its 1st Stakeholder workshop on

Low-cost sensors and vectors for variety testing

Objective: This workshop will focus on low-cost sensor and vector technologies for variety testing. Innovative contributions that involve widely accessible and reproducible plant phenotyping technologies will be presented; among others: smartphone-embedded sensors, Internet of Things technologies, credit card mini-computer systems, associated with low-cost vectors made available under 3D printable objects, do-it-yourself item lists, embedded artificial intelligence under open sources.

Program: 9H-16H30

9H-9H30: Welcome and short presentation of the INVITE European project (<u>https://cpvo.eu-ropa.eu/en/news-and-events/news/invite-successful</u>)

9H30-12H30: Field demonstrations: Testing low-cost vectors and sensors in the field - one group on

fruits (INRA Beaucouzé) and one group on arable crops (GEVES L'anjouère). Confirmed demonstrations :

- Fruits: Connected glasses (IRHS-INRA), Smart Phone Apps (Culteva[™], Plant Screen Mobile), Variety testing ImageJ plugin software (WUR)
- Arable crops: Hyperspectral cameras (Carbon Bee, Hardop), Internet of things connected caliper and compass (IRHS, GEVES), UAV-Drone (HiPhen)

12H30-13H30: lunch

13H30-16H00: Presentations from experts in phenotyping and round table discussion with the audience to define expectations of stakeholders and how they can be answered by the INVITE project. Confirmed speakers:

- Low-costs vectors Scott Chapman (CSRIO, Australia)
- Low-costs sensors Mark Müller (Juëlich Plant Phetnotyping Centre, Germany)
- Machine learning Ian Staveness (University of Saskatchewan, Canada)

16H00-16H30: Synthesis from the field demonstrations and conclusion words

Organizers: David Rousseau (University of Angers), Valérie Cadot (GEVES), Didier Demilly (SNES), Rick Van de ZEDDE (WUR)

Meeting venue: Université d'Angers (Campus Saint Serge) - School of Law, Economics and Business Studies - 13, Allée François Mitterrand, Angers (France)

Registration is free but mandatory before 14th June on: https://enquetes.inra.fr/index.php/447182?lang=en

Associated special issue in sensors journal: <u>https://www.mdpi.com/journal/sensors/special_issues/sen-</u>sors_vectors_plant_phenotyping









