

## TECHNOLOGY TRANSFER AND INNOVATION

### Smartgrappe: colorimetric characterisation of grape clusters using a smartphone

#### TECHNICAL DESCRIPTION

This device easily measures the colorimetric heterogeneity of grape clusters, an analysis which is usually complex and difficult to repeat. The result is displayed as an easy to interpret graphical illustration.

The analysis tool includes a smartphone application integrated into a support casing.

The casing (patent pending) removes ambient light and helps keep an almost constant distance between the grape cluster and the photographic device.

The smartphone application is able to:

- take a photograph in optimal conditions for quality and reproducibility (colour, distance, etc.);
- calculate colorimetric levels for each image;
- provide colour distribution for each image (colour heterogeneity);
- provide an indication of heterogeneity using a simple graphical illustration.

#### DEVELOPMENT STAGE

- Pre-industrial prototype

#### IP RIGHTS

- Patent Application No. 11.59385. Accessory and device to acquire the image of an object
- IDDN no/ FR.001.500052.000.S.P.2011.000.21000

#### Research team(s)

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#### Partnership type

#### Licensing

#### POTENTIAL APPLICATIONS

- Viticulture
- Any field requiring the spatialisation of colour information: human health, plant health, food processing, jewellery, coin collecting, automotive body work, building, public works, etc.

#### BENEFITS

- Simple to manufacture and commercialise.
- Low manufacturing costs.
- Portable and light device (less than 200g without the smartphone)
- Adaptable to any available smartphone with a flash.
- The software compensates for any variability in the photographs.
- Smartphone services: geolocation, GSM data exchange, etc.
- Can be easily modified for other uses.

#### Contact

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