SEED DUST-OFF MEASUREMENT DEVICE

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The invention refers to the estimation of the dust amount potentially released by seeds treated with pesticides or micro-organisms (dust-off). The treated seeds are, by law, colored, thus the proposed method is based on a simple colorimetric and visual approach. The device overcomes the limits of the current official standard for assessing the release of powders (gravimetric method).

Protection: International

Inventor: Cesare Accinelli

INVENTION

The proposed approach and device refer to the use of portable optical systems, or stereomicroscopes, that could be inserted in smartphones.

Many research groups and small companies involved in the development of fim-coating technologies are strongly limited by the gravitational approach. The use of a low-cost device not requiring huge investments and long analysis times, can represent an evident advantage to stimulate research in the sector. Moreover the invention can be a useful tool for agricultural operators and seeds supply chain to assess the environmental impact of the seeds and to monitor health effects on both humans and animals exposed to powders.

ADVANTAGES

- Easy-to-use and affordable device;
- Allows to assess the exposure of the seed industry workers to the risk of inhalation, in a completely novel way.

APPLICATIONS

- Seed industry;
- Phito-pharma companies;
- Agriculture and agrochemistry;
- Environmental risk management.

CONTACTS

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