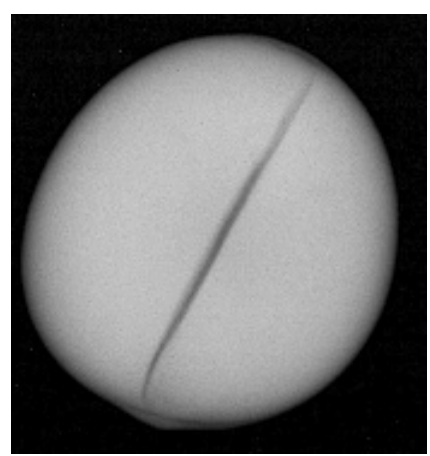
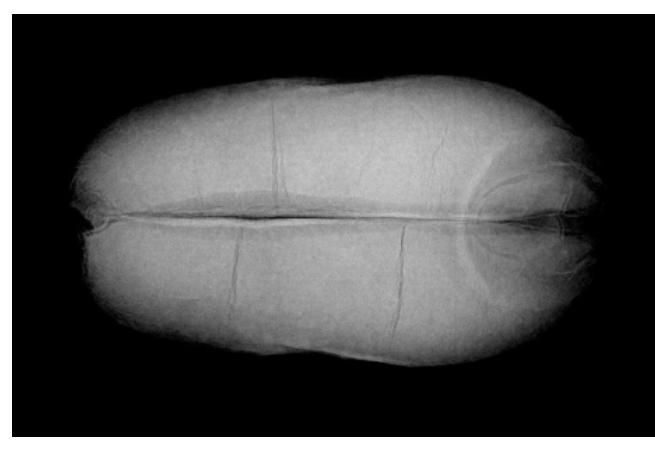


What can the 2D X-ray be used for ?

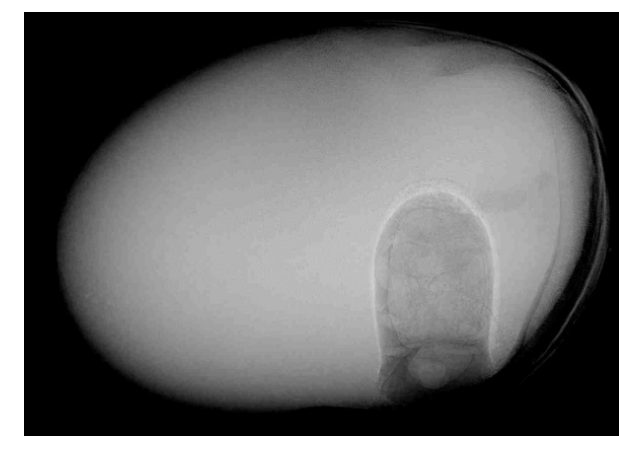
Assessing physical damage



Pea with inter cotyledons spacing

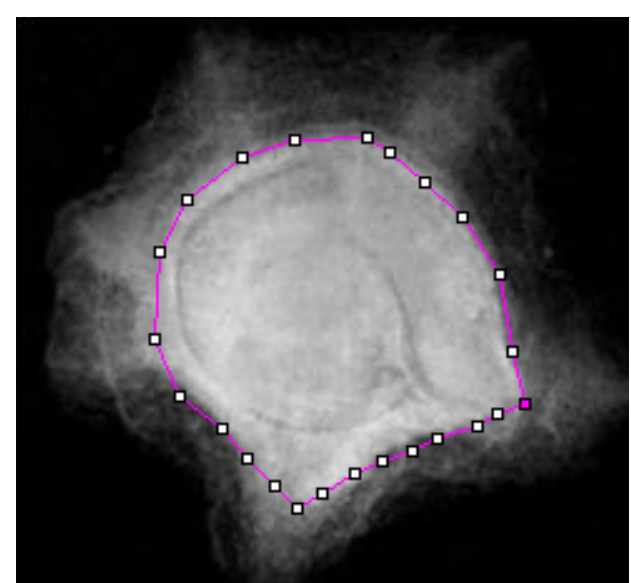


Wheat with cracks



Faba bean with adult Bruchids inside

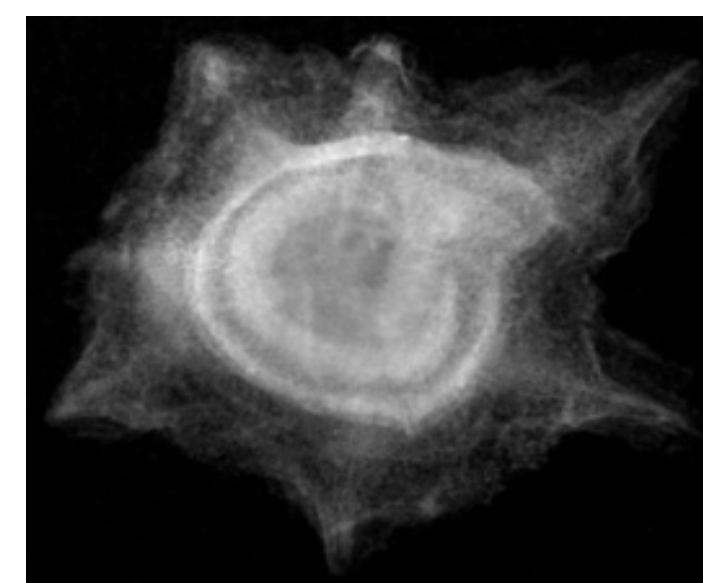
Correlation between internal morphological characteristics / germination and measurements



Empty beet seed

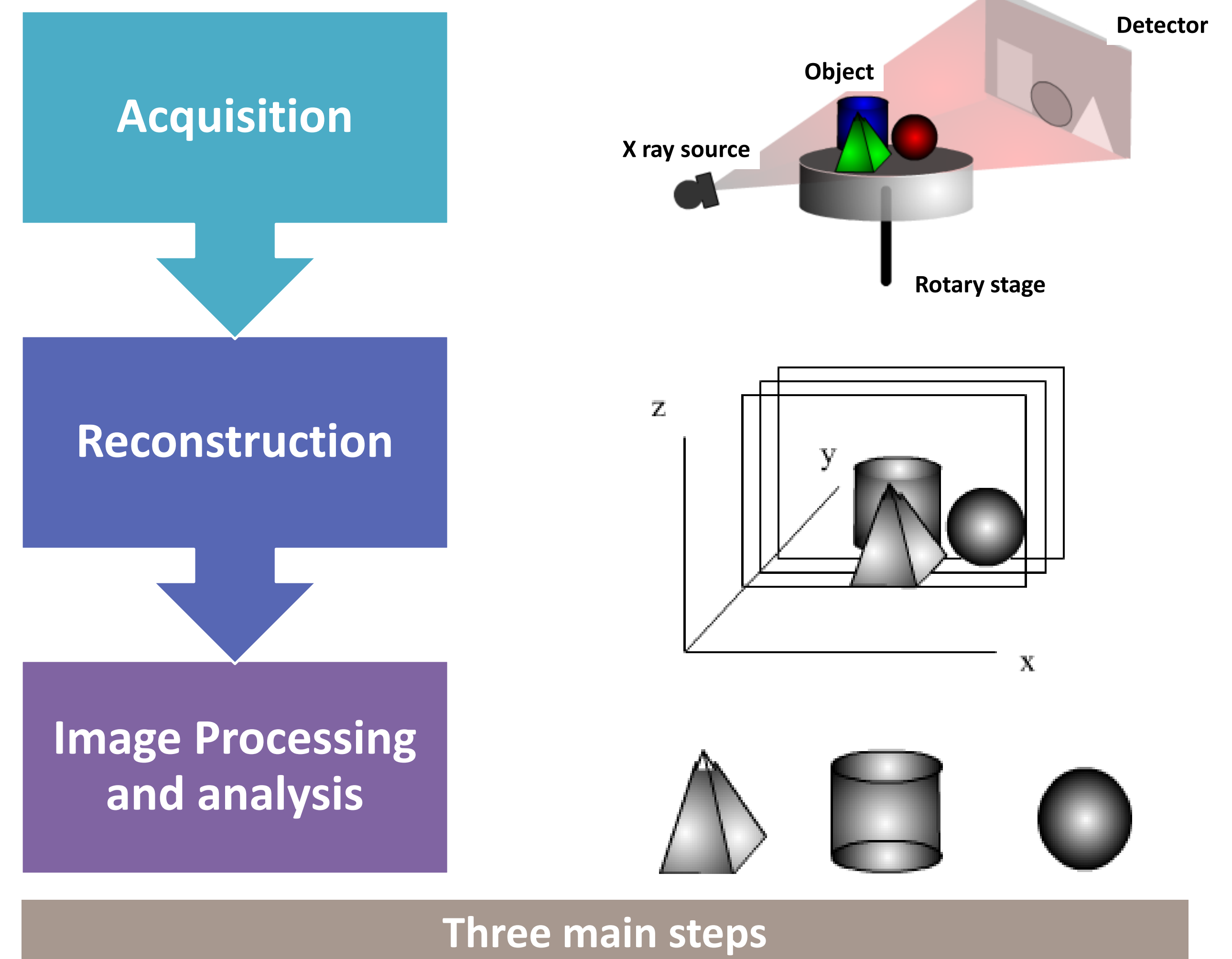


Full beet seed



Abnormal beet seed

What is the principle of the tomography?

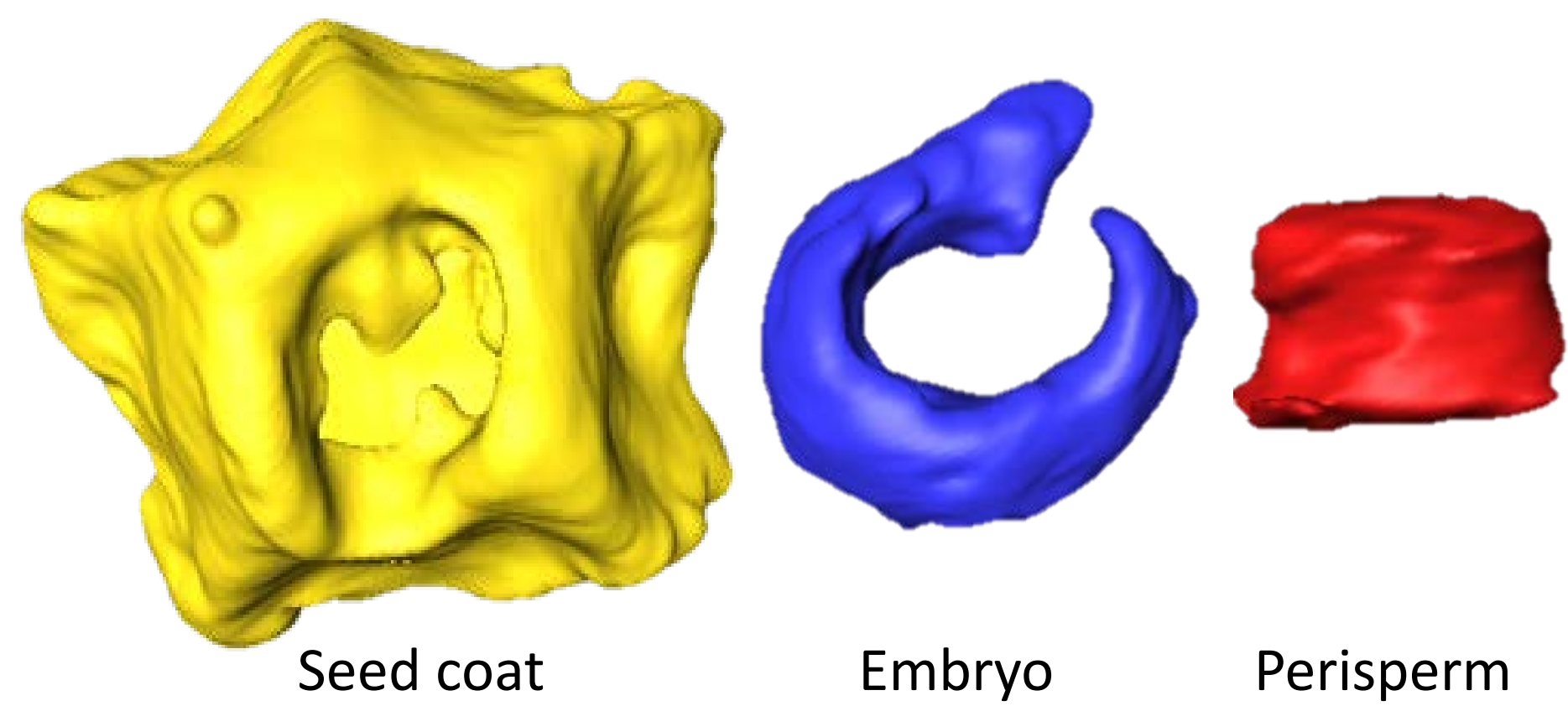
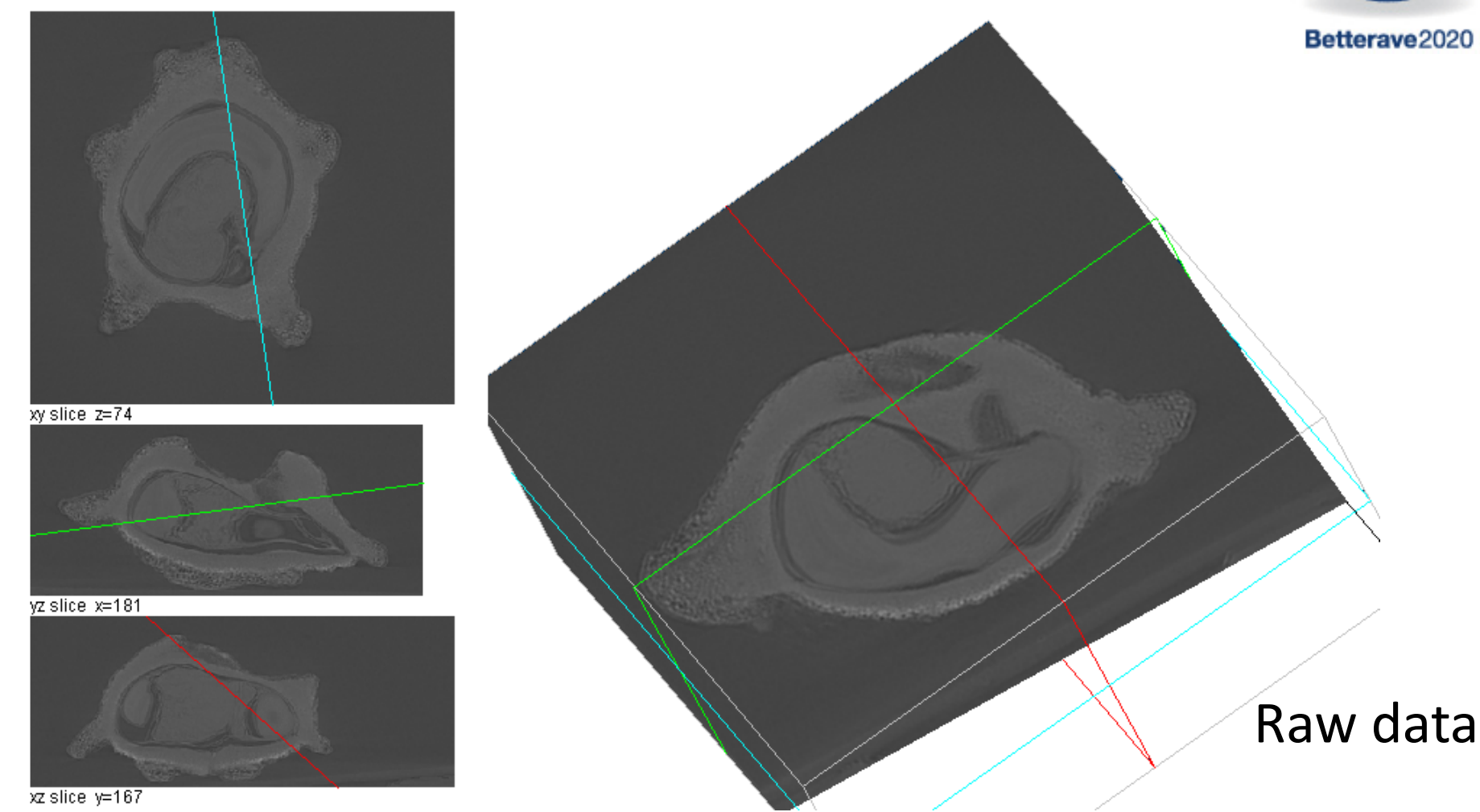


What can the microtomography be used for ? (some current applications)

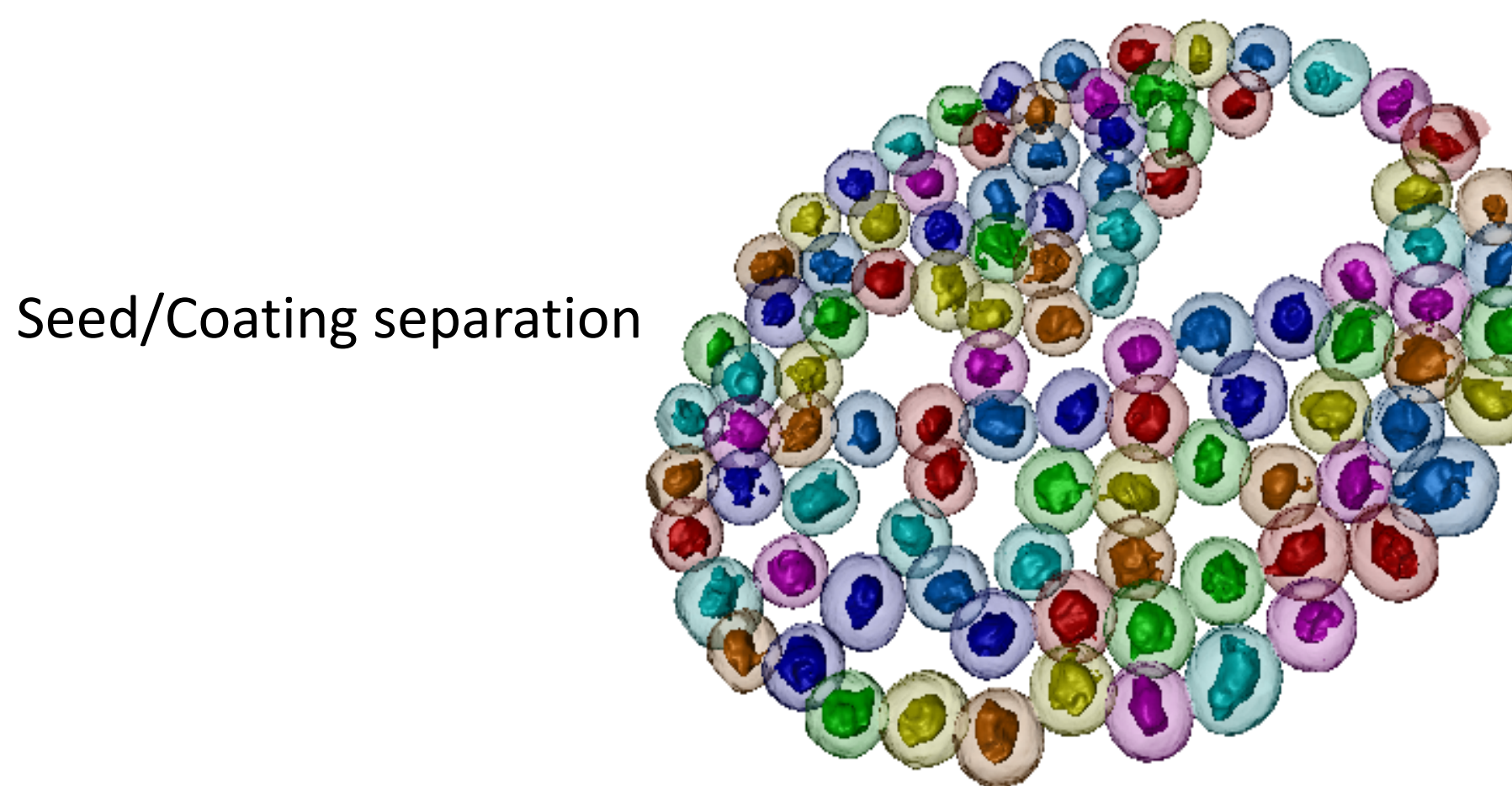
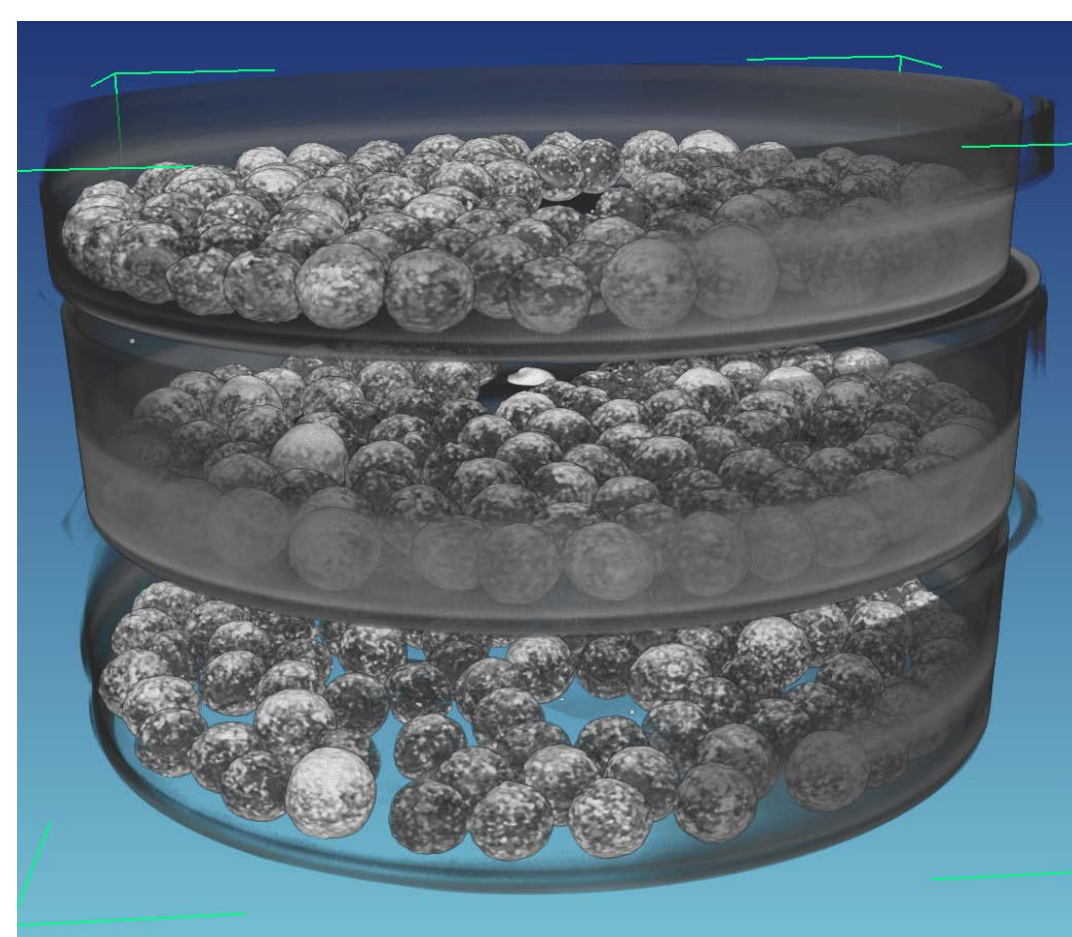
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3D Measurements of internal and external beet seed structures (Volume, surface, etc.)



Volume assessment of seed and coated material on coated beet seeds



Three-dimensional characterization of insect damage in Faba bean seed



Applications and perspectives

High-throughput phenotyping

Coated seeds Impurity detection Batch processing Porosity

Imbibition process All species Pathogen detection Contrast improvement

Germination correlation Priming effect Density

Sorting effect Viability during storage

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The main official missions of GEVES are:

- to conduct DUS and VCUS studies for the Registration of new varieties in the Official Catalogue
- to conduct DUS studies for the Legal protection of varieties (PBR)
- to evaluate the quality and the varietal identity of seed lots and for the Certification of seeds, for species requiring statutory certification.