

National certification and international trade of seed lots require an evaluation of their quality according to standards set by national, European or international regulations. Control analyses are performed on representative samples of seed lots using the International Seed Testing Association methods (ISTA). The French National Seed Testing Station (SNES) is the Official Reference Laboratory and does approximately 80,000 analyses per year on all crops.



Purity analysis

The sample (2500 seeds) is separated into three components. Their proportions are expressed as a percentage of the total weight analysed. The other seeds and nature of inert matter are identified.



Pure seeds



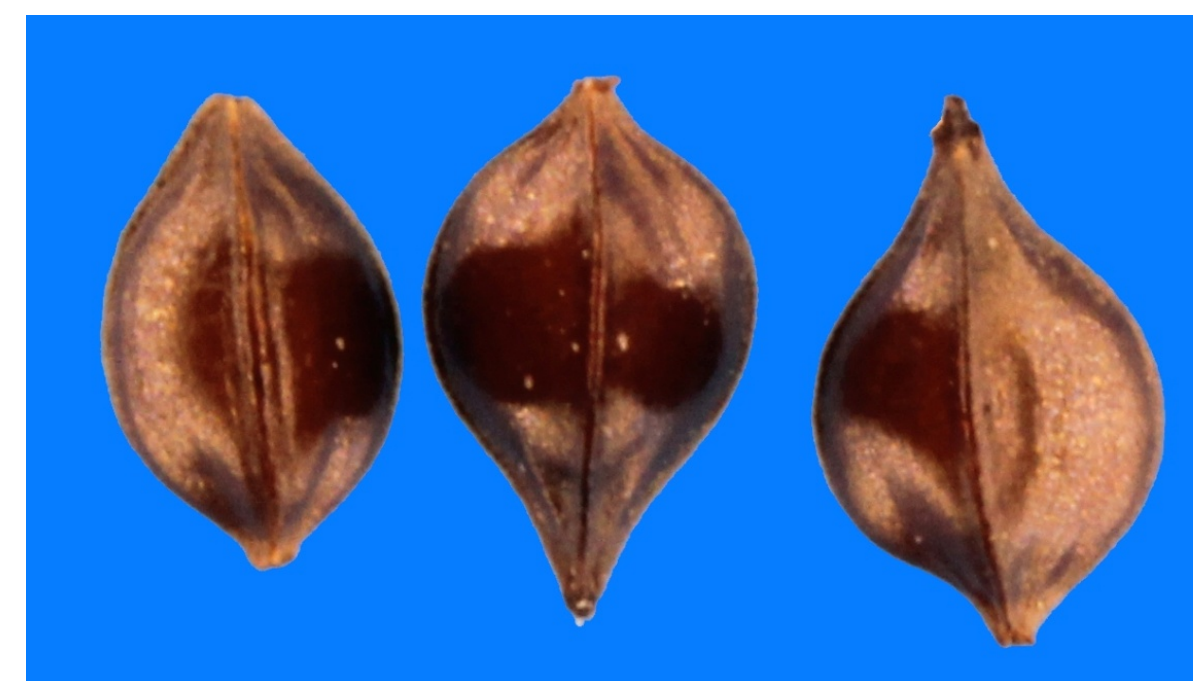
Inert matter



Other seeds

Determination of other seeds by number

This analysis determines the number of other seeds in a sample of 25,000 seeds. The aim is to identify and count any noxious or unwanted seeds.



Rumex sp.



Raphanus raphanistrum L.



Avena fatua L.

Seed Identification

Analyses are performed by observation using magnifying lenses or stereomicroscopes. Seed collections and technical reference materials are used to identify species which are sometimes very similar (as shown below).

From left to right:

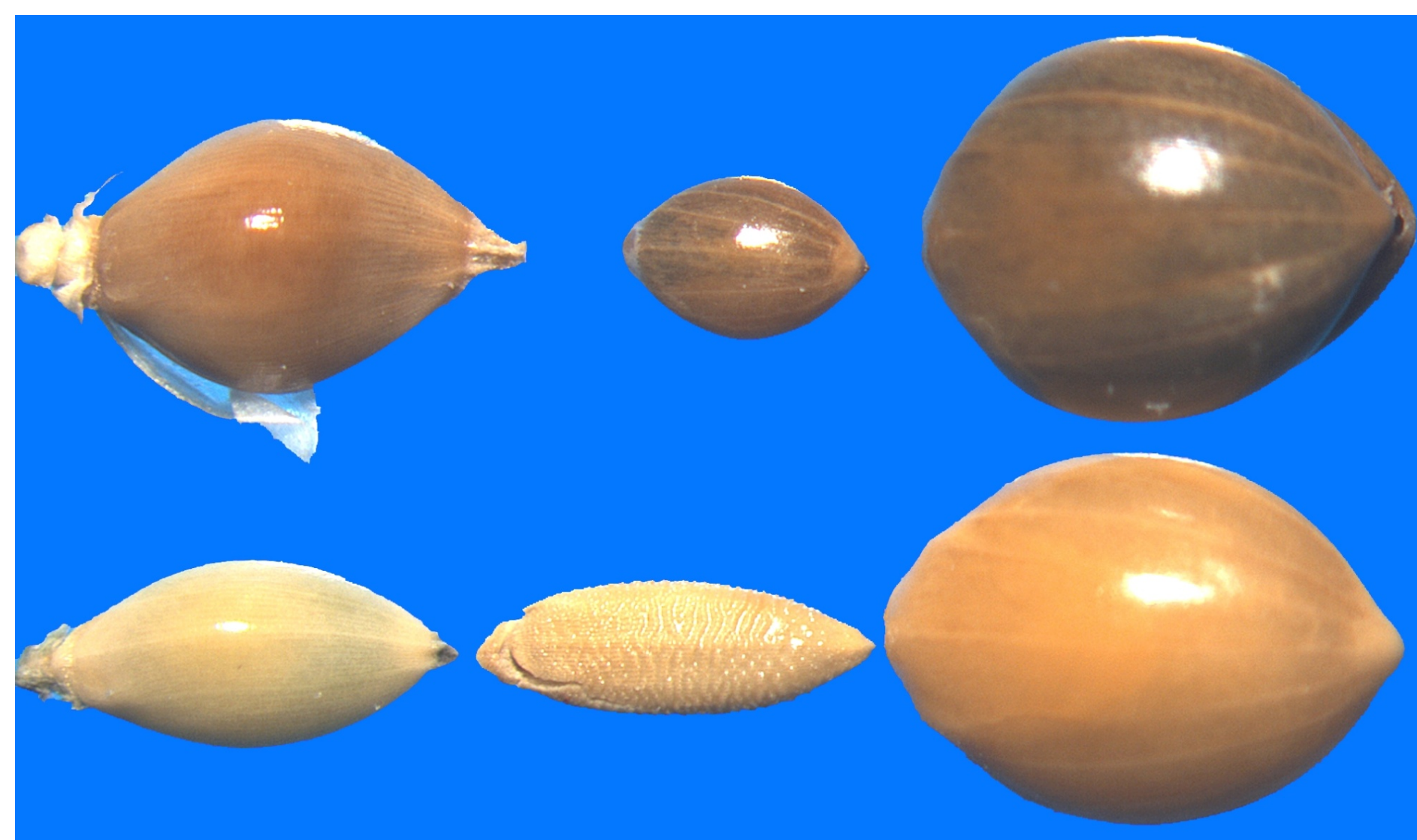
Lolium sp.

Festuca arundinacea
Schreb.

Festuca pratensis huds.

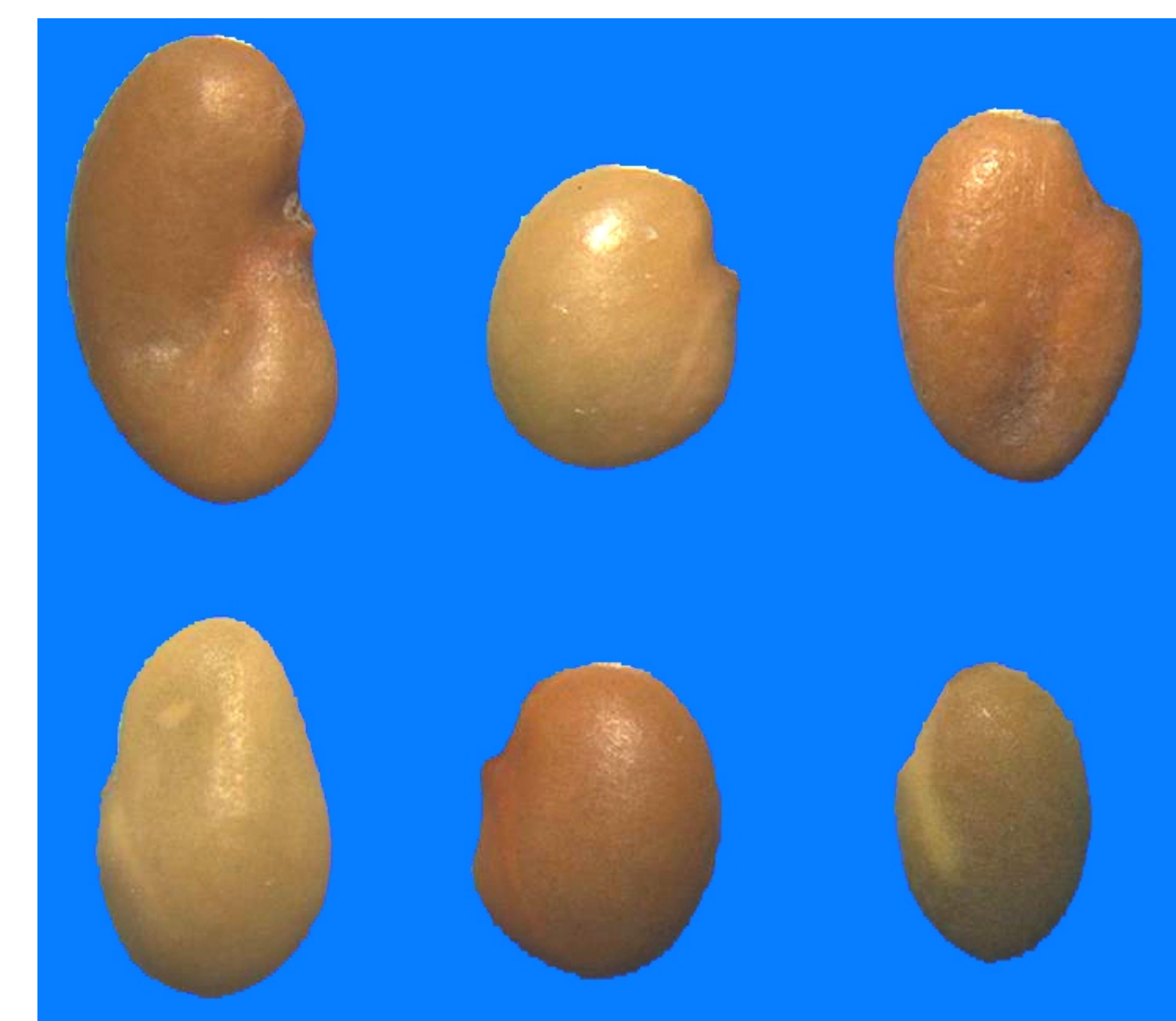
Festuca cf ovina rubra

Dactylis glomerata L.



Echinochloa crus-galli (L.)P.Beauv, *Panicum capillare* L.
Panicum spontaneum L.

Echinochloa colona (L.)Link, *Panicum maximum* Jacq,
Panicum miliaceum L.



From left to right:

Medicago sativa (L.)

Medicago lupulina (L.)

Melilotus sp.

Conclusion

The very high reliability of these analyses is obtained through the strict application of the standardized methods of ISTA by trained SNES analysts who have expertise in seed identification.

Contact

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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.