**Target**

Monitoring and retracing of identity, status and location of seed material.

**Coding of seed material**

The seed material is kept in individual seed bags in crates, to which coloured labels are attached. The color of the label indicates the type of material and the process it is in. The text on the label gives more information about the contents of the crate. These labels are used in both drying rooms and freezers. This makes it easy to distinguish the type and status of the seed material.

The individual seed bags contain additional information about the contents, such as, for example, crop, ANR, RNR and/or year of multiplication.

Below is a brief overview of the color labels attached to the crates.

Pink New material from acquisition, awaiting curatorial decision  
Yellow Material awaiting multiplication  
Blue Material awaiting determination of quantity/germination/absorption  
Green Material in the process of absorption  
White All accepted material (material with 'accessed' status)   
Red Deviant material   
Orange Third-party material, Special collections and material under embargo

In many cases, it is desirable to attach 2 labels to the crate. One with the batch number clearly legible on it, and one with additional information.

**Traceability**

All recorded seed material is registered in GENIS. Besides information on the seed lots themselves (such as passport information and information on seed quantities and multiplications), the location of the bags is also stored. For each seed bag, the number of the freezer, rack and bin is recorded. All unabsorbed seed material stored in the freezer at -20°C, except for material with blue labels, is stored under batch number. This batch number is on the colored label attached to the crate, and this number is associated with a location that can be looked up in GENIS.

Material with blue labels is stored in a fixed location in the freezer and is thus always easy to find.

For a comprehensive overview of exactly what is covered by which label, how labels and individual seed bags are coded, and where this information is recorded, see OVZ-CGN-PG-002.

**Storage and coding of DNA material**

DNA material from projects in which the CGN is (has been) involved have been stored since 2001 for possible future use, aimed at obtaining more information about the CGN's collections. In order to expand the DNA collection faster, when requests for seed samples where it is clear that they will be used for DNA research, the relevant curator consults with the applicant to make the remaining DNA available to the CGN. If the applicant has agreed to this, a protocol for supplying DNA with the seed material is sent by the curator (see PRT-CGN-PG-401 Protocol DNA samples).

Eppendorf tubes or microtiter plates containing DNA material are stored in coded boxes at -20°C in the genebank freezer facility. Each DNA sample is documented in an electronic data file with storage location and other relevant information such as identification of the material (e.g. CGN number with generation number), extraction methods used, quantity and concentration of DNA. DNA storage, including its data management, is the responsibility of the researcher molecular marker applications.

**Deviating seed material**

All types of deviating seed material are marked with a red label. Below is additional information on the different possible types of deviant material

* Original source material, already used for multiplication, is always kept. It can be used for subsequent multiplication in case something went wrong with the previous multiplication. It can also be used to identify the current material.
* Source material with a low probability of future use, or material with archive status without ANR, will be retained as long as future use by CGN or others is not ruled out.
* Archived material with ANR is always retained. A decision can always be made to restore it to the regular collection, see INS-CGN-PG-003.
* Seed too much for inclusion was included in the past as aberrant material. This is now no longer done, and discarded over time in consultation with the trustees.
* In case of 'not enough seed after multiplication and/or harvested on too few plants and/or too low a germination rate', the material is kept until after the next multiplication. If it is no longer needed by then, it is destroyed.
* Open seed bags determination repeat germination. These bags are discarded after completion of the germination tests of the crop in the year in question, unless germination tests still have to be repeated in the following year or photos of the seeds still have to be taken. In that case, the bags will not be discarded until that is also completed.