**INS-CGN-PG-004 Regeneration in case of seed depletion**

**(User- versus Base multiplier)**

There are two reasons for multiplying material in the CGN collection (i.e. with status 'Accessed'). The first reason is that there is too little seed to send to users, this is the trigger for 'User multiplication'. The second reason is that there threatens to be too little base seed to reliably propagate anymore, this results in a 'Base multiplication'.

In addition to seed stock depletion, germination may of course trigger a Base multiplication. In addition, a curator can always decide to carry out a User- or Base multiplication in anticipation of stock depletion, or to maximise the capacity of a planned multiplication.

**User multiplier**

A User increment is planned if there are too few U-bags. That is, the number of U-bags plus the number of U-bags that could be made from the R-bags is less than the minimum, as defined per (sub)crop. This minimum is 4, except for cabbage (CNR is 7) where the minimum is 6, lettuce, spinach and *Allium* (CNR is 6, 16 or 17) where the minimum is 10, except for some lettuce sub-crops (0670 - 0690) where the minimum is simply 4.

For a User multiplication, any type of seed can be used, but the preferred type is Base seed (material coming from a Base multiplication). The seed resulting from the User multiplication is stored as U-bags of a User multiplication.

**Base multiplier**

A Base multiplication is planned before there is a shortage of basic seed, preventing reliable multiplication. Two M bags of basic seed are needed for reliable Base multiplication.

By default, there will be two M-bags until multiplication. However, in some cases this number turns out not to be present. In these cases, a Base multiplication should be planned as soon as two M-bags could not be made with the remaining bags of Base seed either.

Base augmentation will also be decided when the accession is 'up for germination' but there are no more G-bags and R-bags.

**Collection\_Management list**

The Collection\_Management list provides the information on the basis of which it can be decided to increase an accession. This list is created regularly, or upon request, by the Head of Documentation and placed on the network drive: N:} Collection Management PGR03-002-064 Collection Management Reports.

**Inclusion standard**

The target numbers for the number of bags of basic seed of the different types are defined per subcrop (in the GENIS table GNS\_SUB\_CROP). No target numbers apply for a User multiplication.

**Thousand Grain Weight (TGW)**

To enable conversion of the contents of the R-bags to numbers of seeds and thus potential U- or M-bags, the TGW for each subcrop is defined (also in the GENIS table GNS\_SUB\_CROP). It is used only if the TGW of the accession in question is unknown.

**Deviation from normal procedure**

If Base multiplication should be done, due to base seed depletion or decline in germination, user seed, base seed can be made provided the following conditions are met:

* the User increase took place recently, less than a decade ago,
* the germination rate is above the norm,
* the user seed is only one generation older than the current basic seed (see INS-CGN-PG-006),
* the user-seed has been permanently stored at -20° C.