Leafy vegetables GENRES project successfully completed!

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A consortium of twelve partners from ten European countries recently finished a four year project, 'Leafy Vegetables, stimulating use', coordinated by The Centre for Genetic Resources (CGN), Netherlands, in the framework of the European GENRES programme.

The project focused on the improvement of the ex situ management of the European genetic resources of leafy vegetables such as lettuce, spinach, chicory, lamb's lettuce and rocket. At the start of the project no adequate crop databases were available for spinach, chicory and minor leafy vegetables and the international lettuce database needed updating. Consequently, the European genebank community did not have a good overview of their stored leafy vegetable germplasm and gaps in collections could not be identified, resulting in the absence of a clear collecting strategy for leafy vegetables. Furthermore, there was limited access to trait data in databases which made it difficult for the user to select appropriate accessions. Safety duplication was also lacking for part of the European collections. Last but not least, the visibility of leafy vegetables to the general public was low, limiting their use.

To address these issues, the consortium developed a unique leafy vegetable crop portal on the web (http://documents.plant.wur.nl/cgn/pgr/LVintro/) in which most, if not all, leafy vegetables present in genebanks worldwide were included

and all the information could be retrieved using the same format. The limited access to trait information in leafy vegetable crop databases was addressed by the implementation of a download utility in the crop portal. This facility allows the easy downloading of passport data, C&E data and utilization data. The portal also allows detailed gap analyses and on the basis of such analyses, recommendations were formulated on which leafy vegetable species to collect and where. The lack of safety duplication of several leafy vegetables collections of the partners is a threat to the long term sustainability of these collections. Actions were therefore taken to increase the level of safety duplication and all base collections of the partners are currently safety duplicated. Regeneration, characterization and evaluation are crucial aspects of proper genebank management and most of the time on this project was devoted to these activities. In total 1386 accessions were regenerated, 1950 characterized and 770 were evaluated. These numbers significantly exceeded the targets set at the start of the project. Via a number of workshops with NGOs, which were open to the general public, the wealth of tastes, colours and forms of leafy vegetables were shown in order to stimulate their use.

In summary, the actions carried out in the GENRES leafy vegetables project

will almost certainly lead to a better management on the European level of leafy vegetables collections and will contribute to more sustainable use of these collections. More information on the project can be found at http://documents.plant.wur.nl/cgn/pgr/leafyveg, or contact: Chris Kik, Head Curator Crops, Centre for Genetic Resources, the Netherlands (CGN), Wageningen University and Research Centre chris.kik@wur.nl



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Partners and observers at the final meeting of the GENRES Leafy Veg in Montfavet, France in November 2010. Photo: C. Kik, Centre for Genetic Resources, The Netherlands