

Proposal to the ECP/GR Steering Committee for the establishment of an ECP/GR Leafy Vegetables Working Group.

Importance of leafy vegetables

The group of leafy vegetables is represented by a large number of vegetable crops from different botanical families. At least eight species belonging to the six families are considered economically important. Leafy vegetables belongs to the most important vegetable crops in Europe^{1,2,3}, for example, the world lettuce seed market is about 80 million Euro, of which about 50% is in Europe.

Leafy vegetables genetic resources in Europe

In Europe there are at least 17 institutions conserving leafy vegetables genetic resources with more than 12.000 accessions (41 plant species; 10 crops, 31 wild relatives) currently stored in European collections. Approximately 82% of these accessions are represented by lettuce (*Lactuca sativa*) and wild *Lactuca* spp. The second and third most important crops in genetic resources collections are spinach (ca 9% accessions) and *Cichorium* (ca 7% accessions). Most of these leafy vegetable accessions are held in the Czech Republic, France, Germany, Hungary, The Netherlands, Poland, Spain, Turkey and UK³. There is increasing interest of breeders in the utilization of germplasm from these collections^{3,4,5}.

Background

In May 2000, in Vila Real (Portugal) the ECP/GR Vegetables Group Network Coordinating Group considered the importance of extending collaborative action to new vegetables crops. Within this context, I.W. Boukema (CGN, Wageningen, The Netherlands) and A. Lebeda (Palacký University, Olomouc, Czech Republic) were invited to prepare and present a very detailed survey on Leafy Vegetables germplasm and their status in Europe³. From this presentation and the following discussion, it became evident that the leafy vegetables genetic resources were underestimated within the scope of ECP/GR and there was a strong need to improve and coordinate activities in this area. A decision was made that the main focus should be on lettuce, spinach and *Cichorium*. During the same meeting A. Lebeda and I.W. Boukema were invited to act as focal persons for a “Leafy Vegetables Informal Group” with responsibility to coordinate future ECP/GR activities related to leafy vegetables genetic resources. The first meeting of the “Leafy Vegetables Informal Group” was organized as *ad hoc* meeting during the ECP/GR Vegetable Network meeting (22-24 May, Skierniewice, Poland). The objective of this first *ad hoc* meeting of a “Leafy Vegetables Informal Group” was to start collaboration on leafy vegetables genetic resources (esp. lettuce, spinach, *Cichorium*) between European partners. This meeting brought together representatives of the significant institutions holding collections of lettuce, spinach, *Cichorium*, and their wild relatives. The participants developed the objectives, a work plan for future activities and the management of the Group⁶. The group expressed strong views on the need to

¹ George A.T. 1999. Vegetable Seed Production, 2nd Edition. CABI Publishing, Wallingford, UK.

² Ryder E.J. 1999. Lettuce, endive and chicory. CABI Publishing, Wallingford, UK.

³ Lebeda A., Boukema I.W. 2001. Leafy Vegetables Genetic Resources, 48-57. In: Maggioni L., Spellman O. (comps.): Report of a Network Coordinating Group on Vegetables, *ad hoc* meeting, 26-27 May 2000, Vila Real, Portugal, IPGRI, Rome.

⁴ Lebeda A., Křístková E. (eds.) 1999. Eucarpia Leafy Vegetables '99. Palacký University, Olomouc, Czech Republic.

⁵ Hintum Th.J.L. van, Lebeda A., Pink D.A., Schut J.W. (eds.) 2003. Eucarpia Leafy Vegetables Conference 2003, Proceedings of the Eucarpia Meeting on Leafy Vegetables Genetics and Breeding, Noordwijkerhout, The Netherlands, 19-21 March 2003. Centre for Genetic Resources, The Netherlands (CGN), Wageningen, The Netherlands.

⁶ Thomas G. et al. (comps.) 2003. Report of a Vegetable Network and *ad hoc* Leafy Vegetables meeting, 22-24 May 2003, Skierniewice, Poland, IPGRI, Rome (in press)

continue the work and concluded that a recommendation be forwarded to the ECP/GR Steering Committee seeking the formal establishment of a Leafy Vegetables Working Group within the ECP/GR Vegetables Network.

The agreed list of actions has already led to some significant developments and detailed objectives were discussed during the Skierniewice ECP/GR Vegetable Network and *ad hoc* Leafy Vegetables Meeting.

Objectives

- Create an inventory of Leafy Vegetables germplasm, including minor leafy vegetables.
- Create European databases for spinach and *Cichorium*.
- Re-examine passport descriptor lists and characterization protocols in order to improve standardization and to develop minimum descriptors.
- To obtain information about the status of regeneration, improve and harmonize protocols for seed regeneration and seed storage.
- To obtain information about the status of safety duplications in all collections, including minor leafy vegetable crops.
- Identify, where possible, the most original samples (MOS) of wild *Lactuca* spp. in the collections by the database manager in cooperation with the collection holders. The information would be added to the International Lettuce Database (ILDB).
- Increase cooperation in collecting activities with the countries of origin of the three crops (lettuce, spinach, *Cichorium*) and associated wild relatives.
- Identify the taxonomic status of invalidated (wild) species/accessions maintained in genebank(s).
- The group expressed interest to apply for a EU project focused on Leafy Vegetables.
- Disseminate results and achievements.

Leafy Vegetables Working Group management

In agreement with the Skierniewice *ad hoc* meeting⁶, Aleš Lebeda, would act as the lead focal person of the Working Group together with I.W. Boukema. They would initiate and coordinate the objective-related activities to be carried out by each member of participating countries. One of the major tasks will be to establish a network of stakeholders for Leafy Vegetables genetic resources on a country level. General information collected relating to the working group objectives (Lebeda and Boukema, 2001³, 2003 /in Thomas G. et al. (comps.)⁶/), together with the experience obtained from projects e.g. the Gene-Mine project, will be the guideline for developing further activities up to the end of 2004. Once established, the Leafy Vegetables Working Group will continue its activities as an independent working group within the ECP/GR framework.

Formalization of an ECP/GR Working Group on Leafy Vegetables, accompanied by limited funding to hold a small meeting in 2005 would be sufficient to expand current collaboration to the entire European region focusing on the most important leafy vegetables for the Region. We believe that the establishment of a Leafy Vegetables Working Group within the ECP/GR Vegetables Network will initiate a more productive collaboration on leafy vegetables genetic resources in Europe. The group members appreciate the encouragement and support of the ECP/GR Steering Committee.

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