

RAPD-analysis of the tribe *Vicieae* (Adans.) Bronn

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Investigation of tribe *Vicieae* representatives from the collection of Vavilov Institute using RAPD-analysis is the aim of the research. The tribe is known as the most perfect in the family *Fabaceae* Lindley, but having a lot of taxonomic problems and obscure phylogeny.

The sample of 250 representatives of 51 species from the tribe *Vicieae* belonging to 10 genera (*Orobus* L., *Bona* Medik., *Faba* Mill., *Vicia* L., *Ervum* L., *Lens* Mill., *Ervilia* (L.) Link., *Pisum* L., *Lathyrus* L., *Clymenum* Mill.) had been investigated with the special accent to genus *Lathyrus* (37 species). The accessions selected had the known morphological characteristics, represented the most species types and reflected natural area. 22 primers were applied from which 9 giving the highest polymorphism were chosen for further work. As a result sufficient polymorphism had been detected allowing the identification of each 250 accessions and genetic distances calculated. Intra- and intergeneric level of polymorphism had been determined. Significant diversity of wild as well as cultivated representatives of tribe *Vicieae* had been shown. Specific fragments for genera and species studied have been found. On the bases of data obtained some disputative questions of phylogeny and systematic of the tribe *Vicieae* and taxonomy of the genus *Lathyrus* became more clear. The collection of 500 DNA samples of accessions with different origin and level of domestication is created.

In: Book of Abstracts 5th International Food Legume Research Conference (IFLRCV) & 7th European Conference on Grain Legume (AEP VII). 26-30 Apr 2010, Antalya, Turkey. p. 144