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POSTER - An Analysis In The Structure Of A Genetic Characterized Melon Germplasm Collection For Climacteric-Non Climacteric Ripening Behaviour

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Melon (*Cucumis melo* L. *Cucurbitaceae*) is considered as one of the most variable species in the genus *Cucumis* and one of the most diverse in the cultivated vegetables. Moreover it represents a key species in order to study ethylene involvement in ripening because climateric and no climateric accessions are present. In this study we used a core collection of 198 melon accessions including wild relatives, feral types, landraces, breeding lines and commercial cultivars from 54 countries. This collection was established on the framework of a previous project, selfed, genotyped with AFLP markers and extensively phenotyped for plant and fruit traits at the COMAV. Furthermore a deep transcriptome resequencing work was available of all of the genotypes and representing the largest melon SNP collection. Taking advantage of this information we present here the preliminary study of analysis of the structure of this germplasm collection in order to select a group of melon varieties with great differences in ripening behavior and minimum genetic structure to be used for association analysis studies.