bearing 2～3 years after establishment. The yield in the 5th, 7th and 10th year after establishment is 660～1110 kg/ha, 2220～2553 kg/ha and 2325～3000 kg/ha respectively; (4) very hardy, resisting the low temperatures of -25～-35 °C at the dormancy stage. Good adaptability to soil and possible good growth in the soil of pH value 5.5-8.0. The successes of the hazelnut breeding program in China changed the hazelnut growing from the collection of wild nuts to modern horticulture.

S06.214

The Almond Diversity in Sicily: Observations on Phenological and Pomological Traits and Strategies of Conservation

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On 1997 a wide collection of the Sicilian almond germplasm has been realized in a unique orchard located in the Temple Valley (Agrigento). More than 300 cultivar and/or accession has been grafted onto GF677 by using a sufficient number of trees useful to operate a series of observations aimed to their characterization. Phenological and pomological traits have been evaluated for 5 years after plant maturity and a characterization through main descriptor list has been processed in relation to define strategies of new diffusion. In addition, different studies have been carried out in order to define a protocol for *in vitro* conservation of some accession which evidenced a high risk of erosion. Results of this study shown a really high variability and did particularly evidence the need of an upgrade for descriptor list for almond since many characters resulting so much descriptive are not considered useful in all the list today available. Through statistical analysis of the data collected it has been possible to express a high percentage of the diversity. In few cases (< 15 %) it is necessary a deeper evaluation in order to evidence specific characters of the accessions. It is interesting to note that some accessions have shown interesting traits in comparison with well known and highly diffused cultivars for the Italian almond industry. This observation could open new interesting perspectives in the near future.

S06.215

Toward the Valorization of Superior Genotypes of Chestnuts: (*Castanea sativa* Mill) Native in South Italy: Phenological, Morphological and Molecular Characterization

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A survey has been carried out in the Aspromonte foothills territories (Calabria, South Italy) to the native germplasm of chestnut to select superior genotypes for tree productivity and fruit quality traits. After a preliminary screening within the area object of study, based on tree health and productivity, individual trees, with interesting fruit characteristics were selected and geo-referenced as well. The morphological and horticultural characteristics of those accessions were described using U.P.O.V. descriptors. By the integration of the morphological data and molecular fingerprinting, carried out on tissues samples taken from the above mentioned accessions, using SSRs markers, among the mass of accessions studied, have been selected 60 "superior" genotypes that evidenced a considerable rate of variability in phonological, morphological and horticultural traits. Particularly, the sixty genotypes, on the whole, had a ripening period extending from the end of September to the beginning of November; referring to fruits characteristics, some genotypes evidenced high commercial value: single fruit/husk, episperm easy to remove; seed coat that doesn't penetrate to the inner part of the kernel; single embryo. To improve knowledge on the horticultural performance of the genotypes selected a comparative study to the international cultivars has been planned, to be carried out, under the same prevailing conditions, to select new cultivars to establish a chestnut industry, based on native cultivars, in Calabria.

S06.216

Xylem Characteristics in Some Cultivars of *Corylus avellana* L.

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Xylematic tissues are at the base of some water and nutrient transport processes. The aim of this study was to study xylem characteristics such as vessel density and vessel dimension in order to provide preliminary data for future physiological studies. In other species it was demonstrated that xylem was at the base of hydraulic equilibrium and tree vigor. In this study the three most important Italian cultivars were investigated: 'Tonda Gentile delle Langhe' (TGL), 'Tonda Romana' (TR) and 'Tonda di Giffoni' (TG). Number of vessels per mm^2 and vessels diameter were measured. TGL had larger vessels than TG and TR respectively. Differences were found also in vessel number per mm^2 of xylem tissue. The three more important Italian hazelnut cvs showed significant differences in xylem vessels characteristics. These differences might be the cause for some different vegetative and productive behavior of these three cultivars.

S06.217

Seed Emergency of Genotypes of Dwarf Cashew Cultivated in Salinity Conditions

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The significant presence of the kernel of cashew nut in the export of northeastern Brazil coupled with the high number of jobs resulting this agribusiness makes this culture very important. However, most of the cashew orchards in Brazil are located in arid conditions, under the action of abiotic stresses, especially, the water and salt stress. Currently, the propagation of cashew is vegetative, from elite trees, one of the main factors responsible for increased competitiveness of cashew agribusiness. The nurseries also are located in areas with water and salt stress. An alternative to mitigate the first stress is the use of water of inferior quality, increasing the second problem. Then, the supply of seedlings and plants of high productivity and stress tolerance are extremely important. So, this study aimed evaluate the salinity effect on the percentage and index of emergence speed of seeds of dwarf cashew cultivated in a greenhouse at Embrapa Tropical Agroindustry, Fortaleza, Ceará, Brazil. The CCP 06, BRS 189, BRS 226 and BRS 265 clones were sown in tubes with vermiculite and irrigated with saline solutions with electrical conductivities (EC) of 0, 3, 6, 9 and 12 $dS \cdot m^{-1}$. The experiment was a completely randomized design (4x5), with four replicates of five seeds per plot. Salinity did not affect the percentage and significantly reducing the index of emergence speed of all clones, with the CCP 06 clone presenting the highest values this parameter in normal and stress conditions.

S06.218

'Concettina': a New Italian Flat Nectarine Variety

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Lately, in Italy, have been introduced various varieties of flat fruit peaches, this as a response of the increased consumer's interest to their high fruit quality (sweetness, low acidity, high flavor) and more easy eating shape. The few varieties that cover the Italian cultivation of flat peaches are the ones that belongs to the UFO series, the cv. 'Sweet Cap® Maillarflat*', the old cv. 'Stark® Saturn' and few accessions from local germplasm (e.g. 'Tabacchiere' in Sicily). As flat nectarines, only the new 'Platinet' series developed by CRA-Rome in National Breeding Program and some varieties obtained and proposed by private company, have been recently diffused on the market. 'Concettina', the new flat nectarine variety we have recently released, differs from all the other flat nectarines because derived from stable mutation of