

Section 5 Abstracts: Chestnut Tree Ecology

The Rare Germplasms of Chestnut in China. Liu Liu, Shan an He and Jiu ya Zhou. Nanjing Botanical Garden, Mem. Sun Yat sen, Nanjing, Jiangsu 210014, CHINA

The chestnut species *Castanea mollissima* is rich in diversity as a result of its wide geographic distribution and natural hybridization in China. Abundant genetic resources are found in Chinese chestnut populations. In addition, the variations of natural hybridization between species is found in mixed forests of different chestnut species. This paper is an account of some rare germplasms and promising cultivars.

1. "Jiandingyouli" (Sharp top Oily). Trees produce a high yield at a young age. Nuts are bright reddish brown in color, delicious and more resistant to insects and diseases than most cultivars. It is widely planted and is considered an important cultivar.
2. "Jiujiazhong" (Ninefamilies). Owing to its crown being more straight and dense and somewhat dwarf, "Jiujiazhong" is very suitable in densely planted orchards. It also yields well, and nuts are of good quality.
3. "Honglizi" (Red Chestnut). This cultivar is valuable not only for its productivity and good quality but also as an ornamental plant. The trees sprout red shoots in spring and bear burrs with red spines in the autumn.
4. "Banhua" (Half Flower). This cultivar is characterized by the abortion of its male catkins.
5. "Chuizhili" (Weeping Branch). The variant type has weeping type branches.
6. "Caogouli" (Caogou Chestnut). Apparently, this is a natural hybrid between *C. henryi* and *C. mollissima*. Since it can be grafted on *C. mollissima* and *C. henryi*, it provides a way of overcoming interspecific graft incompatibility.