Yan Hu

Hu Yan, a QiuShi Distinguished Professor and doctoral supervisor at Zhejiang University, specializes in cotton genomics and the exploration and application of superior genetic resources. My research endeavors have centered around integrating cotton genomics with breeding practices, culminating in the achievement of high-quality genome assemblies for the allotetraploid cultivated cotton species, Gossypium hirsutum and Gossypium barbadense. These assemblies have unveiled the genetic foundations underlying their whole-genome divergence. Through population genetics analyses, we have pinpointed multiple loci implicated in cotton domestication and enhancement. We have also pioneered the development of the initial high-density liquid-phase whole-genome chip for upland cotton, introducing the Zhejiang University Cotton Chip 1.0 series. This has facilitated the establishment of an effective breeding platform, fostering the innovation of new cultivar varieties. Furthermore, our team has uncovered pivotal genes associated with fiber and gland development, leading to the creation of a novel cotton variety featuring "glandless seeds and glanded plants." This breakthrough provides invaluable material for advancing the comprehensive utilization of cottonseeds.