RESEARCH AND DEVELOPMENT OF ACACIA HYBRIDS FOR COMMERCIAL PLANTING IN VIETNAM
Le Dinh Kha, Ha Huy Thinh

Summary
Acacia hybrid (Keo lai) refers to the interspecific hybrids of A. mangium and A. auriculiformis, including natural, artificial and polyploid ones. Natural acacia hybrid in Vietnam was discovered since 1993. The superiorities of selected acacia hybrid are fast growth, straight stem form, small branches, high productivity, and high wood recovery. Acacia hybrid was recognized having a higher pulping potential and greater soil improvement ability than that of parental species, which may be related to 2.5-13 times larger number of nitrogen-fixing nodules on its roots in nursery stage. Mass propagation technology by both cutting and tissue culture has been successfully developed for acacia hybrid, enabling large-scale clonal forestry to improve plantation productivity and quality. The area of acacia hybrid plantations up to end of 2015 was estimated to be 500,000 ha, with an annual increase of 30,000-35,000 ha, making it the most widely planted forest tree variety in Vietnam. Acacia hybrid and its propagation technology have also been transferred to Malaysia, Indonesia, Thailand, Laos, and Cambodia. The research and development of acacia hybrid breeding can be considered as a revolution in the forestry sector and has created new and advanced approaches for both research and training in tree breeding in Vietnam.

Keywords: Acacia hybrid, Acaia mangium, Acacia auriculiformis, acacia triploid, acacia germplasm transfer, clonal test of acacia.