

## Reference : PAG-XIII-P127

[\[Submit comment/correction\]](#)

Reference Title Variability Of Cotton Diploid Species SSR Amplification In Interspecific Hybrids

Journal [Abstract of Plant and Animal Genome Conference, San Diego, CA, USA](#)

Journal\_code PAG

Year 2005

URL <http://www.intl-pag.org/PAGarchives.html>

Author [Konan ON](#)

[Baudoin JP](#)

[Benbouza H](#)

[Lacape JM](#)

[Mergeai G](#)

Abstract A total of 206 mapped SSR markers distributed on the 26 linkage groups of the most recent *Gossypium hirsutum* genetic maps were used to monitor the introgression of diploid species chromosome fragments in the framework of three different breeding programmes involving the *G. hirsutum* x *G. raimondii* x *G. sturtianum* (HRS), *G. hirsutum* x *G. longicalyx* (HL) and *G. hirsutum* x *G. australe* (HA) interspecific hybrids. In these three hybrids, the rate of reduction of the diploid parent specific SSR numbers were respectively 31 % for *G. longicalyx*, 38 % for *G. sturtianum*, 46 % for *G. raimondii* and 42 % for *G. australe* while the number of specific *G. hirsutum* SSRs remained almost unchanged. An important part of this variability in the amplification of the diploid species specific SSR alleles in the interspecific hybrids can be explained by the high level of heterozygosity observed in the different parent species which was respectively 94.4 % for *G. longicalyx*, 62.1 % for *G. sturtianum*, 65.5 % for *G. raimondii* but only 12 % for *G. australe* . The possible influence of other factors mentioned in the literature to explain this phenomenon is discussed.