Cell Engineering and New Germplasm Development in Cotton

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Abstract: Germplasm development in cotton has been carried out through cell engineering aiming to broaden the germplasm for cotton breeding. This paper introduced the achievements in cotton cell engineering in HZAU (Huazhong Agricultural University) from several aspects, including first reports of plant regeneration in wild cotton, firstly obtaining somtic hybrids between cultivar (*G. hirsutum* L.) and wild cotton (*G. klotzschianum* A.) and comprehensive validation and evaluation of somatic hybrids.

Key words: cotton; cell engineering; protoplast fusion; somatic hybrid; new germplasm development