1342 An Effective Select Procedure for Cotton Disease Resistant Breeding

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Cotton diseases are a serious detriment to maximum production in China. In the experiment, 161 upland cotton breeding parents, including introgressed lines from G. *barbadense,* and 53 the distant hybridization lines from *G. hirsutum* and *G. barbadense* were evaluated for *Fusarium oxysporum* and *Verticillium dahliae* resistance. Twenty-five lines were identified as resistant to *Verticillium* wilt with the wilt index of 21 lines under 20.0 and 4 lines were under 10.0, with the most resistant line having an index of only 4.3. These disease resistant lines were used to construct 'Disease Resistant Target Trait Breeding Gene Bank,' by intermating. This methodology has produced 11 new and improved cultivars with *Verticillium* resistance. This method is an effective selection procedure for cotton disease resistant breeding.