

Disclosed is a method of producing hybrid seeds, in particular hybrid cereal seeds, comprising crossing a stand of shorter female (male sterile) plants (shorter than the fertile plants) with a stand of taller male fertile plants (taller than the sterile plants). The method comprises limiting the proportion of self-fertilized male seed in the final produced seed stock. In particular, the method limits the seed development on male plants after pollination to reduce or eliminate the proportion of self-fertilized male seed in the final produced seed stock. The method limits this proportion of self-fertilized male seed in the final produced seed stock, under a threshold value, preferably under a value to be compliant with a regulatory hybridity level. Limiting the seed stock of male plant comprises passing, at least once, a tool extending above the height of the shorter female plants, but below the level of the height of the taller male fertile plants, between anthesis, preferably end of anthesis, and harvest. The tool is intended to prevent or reduce normal development of these male fertile plants standing above this height. The crossing of female and male fertile plants comprises sowing the seeds as a mix or drilling male sterile seeds and male fertile plant seeds in separate lines. Preferably, said eliminating tool has means to apply an herbicide, preferably systemic, such as glyphosate.