An efficient *in vitro* haploid induction protocol/method in onion (*Alium cepa* L.)

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As is true in other vegetable crops, hybrids are the major cultivar options in onion as well. Conventional development of near homozygous inbred lines for use as parents of the hybrids takes six to eight years. The development of hybrid parents using doubled haploid technology is the best alternative to this. Toward this effort, we standardized the best protocol to induce haploidy in different open-pollinated onion varieties. Haploid induction is a prelude to development of doubled haploids. The MS and B5 media consisting of 2 mg/l benzyl amino purine (BAP), 2 mg/l 2,4-dichlorophenoxyacetic acid (2,4-D), 2 mM putrescine and 0.1 mM spermidine was found to be the best protocol for haploid induction. The haploid induction frequency varied with the genotypes used in the study. This protocol is expected to hasten the development of doubled haploids in onion.

Keywords: Doubled haploids, haploids, hybrids, inbreds.