

# EVALUATION OF TGMS LINE OF SAFFLOWER (*CARTHAMUS TINCTORIUS* L.) AT RAIPUR

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**Abstract :** Safflower is an often cross pollinated oilseed crop. The oil of safflower contains lenoleic and oleic acid supposed to be the best for human health. Number of spiny or non spiny varieties of safflower has been developed through the India. Now there is constant plateau in the yield, varieties A-1, Bhima and JSF-1 are some of the high yielding varieties their yield level is not crossed by most of the newly developed varieties. This constant yield plateau in safflower can be broken down by exploitation of heterosis, through development of hybrid varieties. To develop male sterile lines number of genetic tools such as CMS, GMS and now TGMS lines are in use and under testing. The major constraint in hybrid development through GMS is maintenance of male sterile lines and required skill hence not popular. At Nimbkar Agricultural Research Institute (NARI), Phaltan (Maharashtra), thermo genic male sterile (TGMS) lines TMS-3-6-7-9 in safflower has been identified. Its seed has been sent to Raipur for its evaluation for pollen sterility and its performance under rice based cropping system at Raipur.

**Keywords :** *Carthamus tinctorius*, crop, safflower

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