

EFFECT OF GROWTH REGULATORS ON YIELD AND FIBER QUALITY AND QUANTITY IN FLAX (*Linum usitatissimum* L.)

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Gibberellic acid (GA₃) at 125 and 250 ppm and indole-3-acetic acid (IAA) at 1.0 and 3.0 ppm were applied as sprays over the canopy to determine their influence on fine-fiber yield, stem length, stem diameter, and fiber elongation. GA₃ treatment increased fine fiber yield by 13-14% and improved fiber fineness by 12-16%. GA₃ decreased chlorophyll content, stem diameter, flowering and boll production. IAA increased fine fiber yield, chlorophyll content, and stem diameter, but decreased fiber strength, and fineness. This research showed that the application of PGRs such as GA₃ and IAA to flax could increase the yield and achieve finer, stronger fiber.