

WEED SEED PRODUCTION POTENTIALS IN *BIDENS PILOSA* L. IN PLANTATION CROPS IN HILL ZONE OF KARNATAKA

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ABSTRACT

Bidens pilosa L. is an annual weed in many cropping systems where it reduces crop yield up to 9 to 48 percent because of its fast growth and competitive ability. This weed is commonly found in gardens, cultivated areas, waste lands and along road sides. The reproductive biology of weed has an implication on controlling practices that minimize the populations on agricultural fields. With this background the study was conducted to know the biology of weed seed production under the canopy of plantation crops. Heavy growth is observed during July to September in South India. A wide variation in plant height, Number of branches, biomass, seed production potential were observed. There was no definite pattern in seed production between seed rain episodes and branches of weed but significant differences were observed in the growth parameters Viz. number of seeds produced from different branches. The time interval between seed rain episodes significantly varies from 4 to 15 days and 37 to 73 days taken to complete entire seed rain episode varies among population. Test weight of seeds collected during seed rain episodes had significantly high (1.64g) between early and (1.08g) at later stage of seed rain episode. There is a positive significant correlation between the growth parameters and the seed yield was observed.

KEYWORDS: *Bidens pilosa*, Seed Production Potential, Seed Rain Episode, Correlation