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TRAP NESTING: AN EASY WAY TO CONSERVE LEAFCUTTER BEES FOR ENHANCED POLLINATION IN PIGEON PEA

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ABSTRACT

Pigeon pea (*Cajanus cajan*) is an often-cross pollinated pulse crop. Solitary bees (Megachilidae) were reported to be the major flower visitors, and visitation by *Megachile* spp increases the pollination and yield of the crop. Leafcutter bees construct their nests in natural pre-existing cavities using materials like leaf, mud, resin, and chewed plant tissues. Our studies were conducted at the experimental farm of ICAR-National Bureau of Agricultural Insect Resources, Yelahanka Campus at Bengaluru, Karnataka, India. We used bamboo trap nests (120 trap nests organized into ten different bundles each with 12 bamboo culms) of 10 mm diameter installed during the flowering stage to document the effect of providing shelter to leafcutter bees. Two plots of pigeon pea one installed with trap nests and another without trap nests were maintained. Four different species of leafcutter bees viz., *Megachile lanata*, *M. laticeps*, *M. disjuncta,* and *Coelioxys* sp. were found constructing nests. The percent pod set, number of seeds per pod, and test weight of seeds in plots installed with trap nests were significantly higher compared to that in the plots without trap nests. The provision of nesting structures in croplands will help leafcutter bees to have quick and easy access to shelter for nesting and foraging facilitating the conservation of these bees and enhancing pollination and yield in pigeon pea.