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THE EFFICACY OF BOTANICAL EXTRACT ON PEST CONTROL AND YIELD OF YARD-LONG BEAN FIELD

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ABSTRACT
An experiment was conducted to study the impact of nine different plant products on controlling viral infestation in Yard-long bean field. Fresh plant materials of Khoksha (Ficus hispida), Chotra (Lantana sp.), Chirata (Swietia chrata), Neem (Azadiracta indica), Beal (Abelmoschus esculentus), Halude-hurhuri (Cleomp viscosa) and Marigold (Targetes erecta), Mahogany seeds (Swietenia mahagoni) and Bishkatali were collected from different regions of Rajshahi. Randomized Complete Block Design was followed for the experiment. Ten treatments were applied and each treatment consists of three replications. This study revealed that extract prepared from Beal leaf was superior in terms of producing more yard-long bean leaves (78.57±0.600). Whereas few number of leaves attack (20.82±0.96) and highest yard-long bean production (77.51±31.85 gm) were found in the treatment of Beal leaf. Out of these botanicals, Beal leaf extract showed the best performance against the pest attack compares to other extracts. Neem leaf extract also showed good performance in the protection of yard long bean plant from pest. Halude hurhuri leaf extracts showed moderate performance against pest. Mahogany seed extract showed the lowest efficacy and hampered the normal average plant growth and low length (55.04±7.18 cm) plant as well as reduced the yield (4.72±4.7 gm) of yard-long bean. Although, Halude hurhuri, Chirata and Marigold leaf extracts were found effective against yard long bean pests but a higher production was observed in the treatments of Beal and Neem leaf extracts in an experimental yard-long bean field.