

**BOP6: Insecticidal activity of leaves of *ruta graveolens* against the Maize Weevil, *Sitophilus zeamais* (Motsch.): A green approach for storage pest management (FB1016)**

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The noticeable propensity towards a 'trek back to nature' has become evident over the past decade in the field of synthetic insecticides resulting out of sheer necessity in replacing these highly toxic chemicals with newer and greener strategies as stored grain protectants in the post-harvest insect pest management programs. In this context, the potential of leaf powder of *Ruta graveolens* (Aruda) was investigated under laboratory conditions for its ability to protect stored maize from the attack of *Sitophilus zeamais*. Efficacy of *R. graveolens* was determined by exposing twenty one week old *S. zeamais* adults to leaf powders, incorporated into 30 g each of un-infested maize grains at the doses of 1.0, 3.0, 5.0, 7.0 and 10.0 g. Adult mortality in both contact and vapor forms was assessed using cup-bioassays and mortality rates at 3 hour intervals up to 24 hours of post treatment were recorded. 100% weevil mortality was observed at doses of 7.0 and 10.0 g within 24 hours of exposure in contact toxicity test, whereas only  $68.00 \pm 3.54$  % and  $76.00 \pm 4.18$  % were recorded respectively in fumigation toxicity test after 24 hours. Moreover, the LD50 values obtained after 24 hours were 1.79g and 5.52g for contact and fumigation toxicity tests respectively, indicating that the contact effect of the leaf powder on weevils is much higher than the fumigation effect. In conclusion, the leaf powders of *R. graveolens* could be considered as a highly probable candidate in the development of bio-insecticides as safer and economic alternatives to synthetic insecticides to suppress *S. zeamais* populations.

**BOP7: The evolution of green buildings and the impact on construction practices: A comparative legal analysis (FP1020)**

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Environment consists of all of the external non-living and living factors, conditions and influences that affect the life, development and survival of a person or a community. The built environment has been applied to things created by human activities. Sri Lanka has a rich tradition and history in the holistic strategies for buildings and constructions which comprise this built environment. Thus while heading for the sustainable development, the concept of GREEN BUILDING has become a prime concern in construction industry in Sri Lanka. Since the construction industry plays a leading role in our country's fast growing economy this emerging trend of green buildings apparently has several impacts on the general construction practices of Sri Lanka. On that backdrop this paper intends to see whether Sri Lanka has enough laws regarding green building concept, Secondly to see the application of those laws in order to deal with them and thirdly to evaluate the efficiency of the laws by comparing it with other jurisdictions. This study follows a legal research methodology based on secondary sources, mainly the internet. This study reveals that unlike other Asian countries such as India and Singapore Sri Lanka does not have a separate legal policy regarding green building concept. Green Building Council of Sri Lanka (GBCSL) is the authoritative body that functions regarding them and it directs the future construction activities. Therefore if Sri Lanka has a separate green building policy it can upgrade the quality of this novel concept along with a multifaceted economic contribution of green