

STUDIES ON THE REPELLENCY OF PLANT DISTILLATES
AGAINST ADULT *SITOPHILUS* SP.

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The volatile steam distillates of leaves of *Ocimum sanctum*, *Vitex negundo*, *Azadirachta indica* and *Citrus acida* were investigated for repellency against *Sitophilus* sp. in the laboratory using a Y-shaped olfactometer.

Of the plants tested *O. sanctum* was found to be the most effective repellent against *Sitophilus* sp. The other plants tested showed repellency of a significantly less degree than *O. sanctum*.

$O. sanctum > V. negundo \simeq A. indica \simeq C. medica$

The repellency of synergistic combination of volatile distillates of *O. sanctum* and *A. indica* was found to be as effective as that of *O. sanctum* alone.

$O. sanctum + A. indica \simeq O. sanctum$

With regard to the duration of the repelling effect of the steam distillates (crude water extracts) of the plants tested, it was found that the freshly prepared and 10 day old *O. sanctum* had the same effect. The preparation of *O. sanctum* 20 and 30 day old showed significantly less repellency than the freshly prepared or 10 day old *O. sanctum*. Similarly, the extracts of other plants too showed a significantly lower repellency than the freshly prepared or 10 day old *O. sanctum*.

$O. sanctum$ (fresh) $\simeq O. sanctum$ (10 day) $> O. sanctum$ (20-30 day)
 $\simeq V. negundo$ (0-30 day) $\simeq A. indica$ (0-30 day) $\simeq C. acida$ (0-30 day).