

Owayss, A. A. and **Abd El- Gayed, A. A.** (2007): Potential efficacy of certain volatile oils and chemicals against greater wax moth, *Galleria mellonella* L. (Lepidoptera: Pyralidae). *Bull. Ent. Soc. Egypt, Vol. 33: 67–75.*

The possible efficacy of some volatile plant oils and chemicals against the greater wax moth (GWM), *Galleria mellonella* L., was investigated. The oils of six plants tested namely; clove; *Eugenia aromatica* L., basil; *Ocimum basilicum* L., thyme; *Thymus vulgaris* L., blue gum; *Eucalyptus* spp., spearmint; *Mintha viridis* L. and lemongrass oil; *Cymbopogon citrates* Hort. Also, six aromatic fragments namely; methyl salicylate, eugenol,, menthol, thymol, camphor and naphthalene were tested. To evaluate the efficacies of these materials as possible alternative control agents against GWM, paradichlorobenzene, acetic and formic acids were compared and the LC<sub>50s</sub> were determined against the 5<sup>th</sup> larval instar. Latent effects of those active materials were studied on some biological aspects of GWM and its developing stages. Obtained results showed that efficacies of the tested materials were different so, highly effective ones (methyl salicylate, formic acid, clove and basil oils) were applied to protect wax combs stored ordinarily in the apiary.