

## Supporting Information

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### Fumigation of volatile monoterpenes and aromatic compounds against adults of *Sitophilus granarius* (L.) (Coleoptera: Curculionidae)

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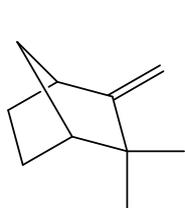
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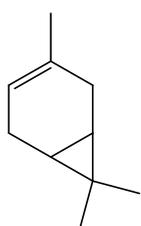
#### Table of Contents

	Page
<b>Figure S1.</b> The chemical structures of monoterpenes and aromatic compounds tested for insecticidal activities against <i>S. granarius</i> adults.	1-2
<b>Figure S2.</b> Mortality (%) of adults of <i>Sitophilus granarius</i> (L.) after treatment with the monoterpene hydrocarbons.	3
<b>Figure S3.</b> Mortality (%) of adults of <i>S. granarius</i> (L.) after treatment with the alcohol derivatives of the oxygenated monoterpenes.	4
<b>Figure S4.</b> Mortality (%) of adults of <i>S. granarius</i> (L.) after treatment with the epoxides, ketones, aldehydes and esters derivatives of the oxygenated monoterpenes.	5
<b>Figure S5.</b> Mortality (%) of adults of <i>S. granarius</i> (L.) after treatment with volatile aromatic compounds.	6

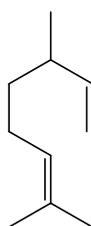
*Monoterpene hydrocarbons*



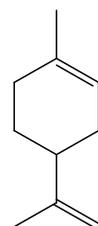
Camphene



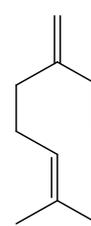
3-Carene



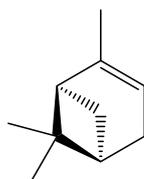
$\beta$ -Citronellene



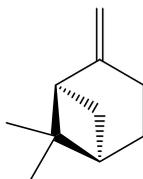
Limonene



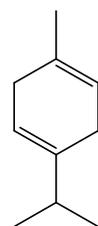
Myrcene



$\alpha$ -Pinene

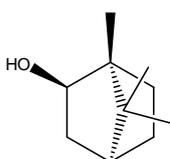


$\beta$ -Pinene

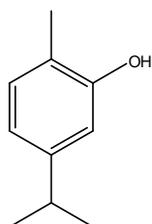


$\gamma$ -Terpinene

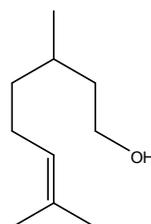
*Oxygenated monoterpenes*



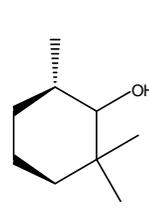
Borneol



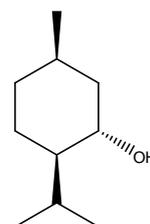
Carvacrol



$\beta$ -Citronellol



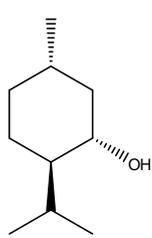
Fenchol



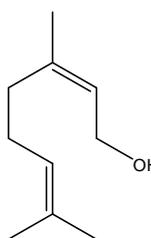
Isomenthol



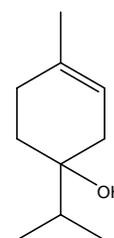
Linalool



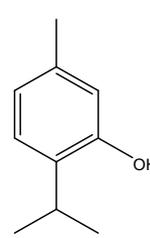
Menthol



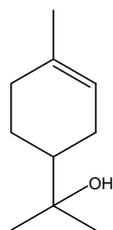
Nerol



Terpinen-4-ol



Thymol



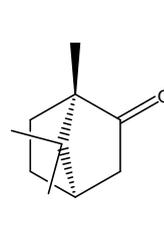
$\alpha$ -Terpineol



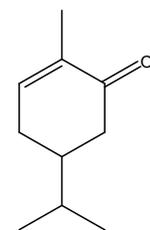
1,8-Cineole



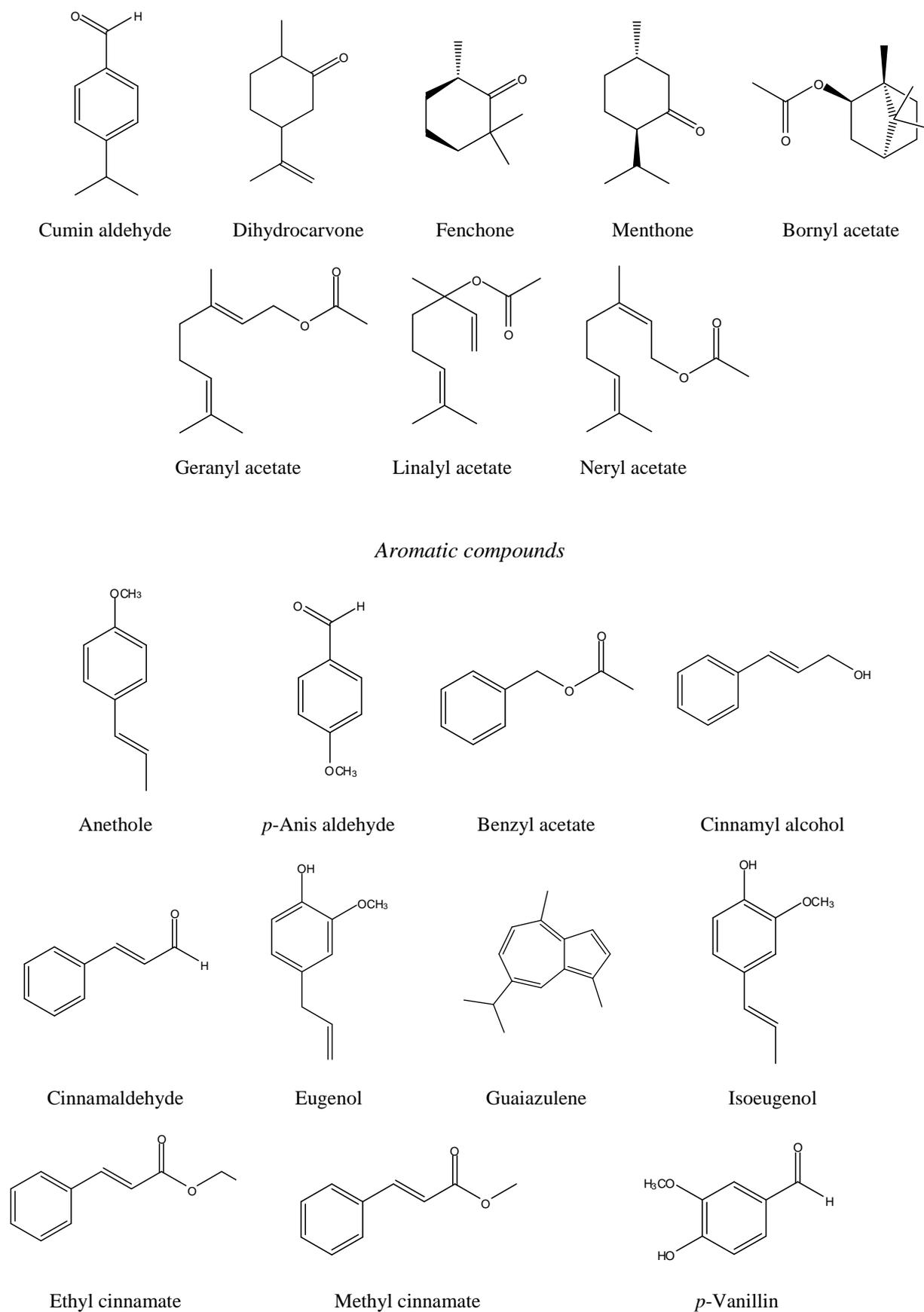
Limonene oxide



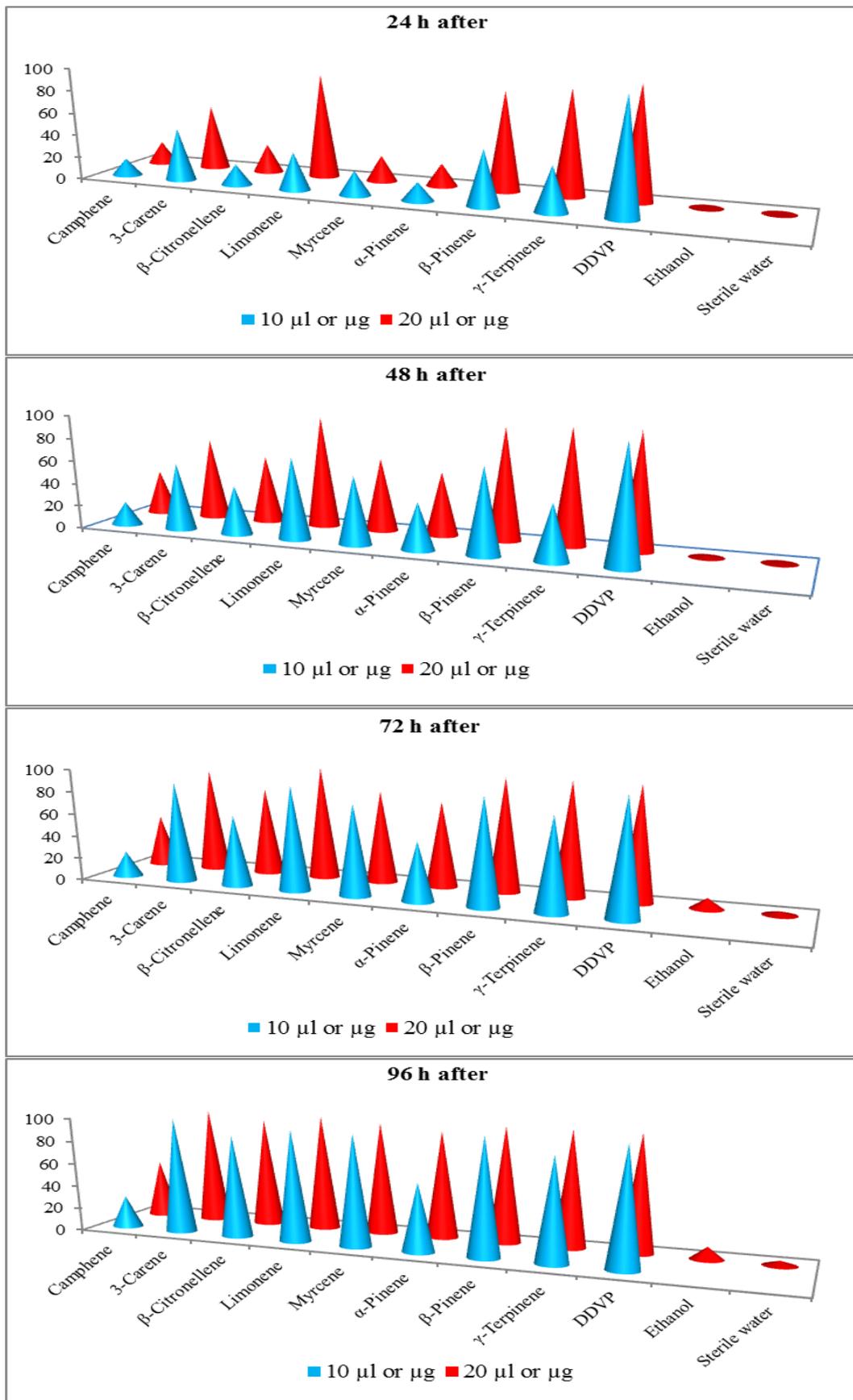
Camphor



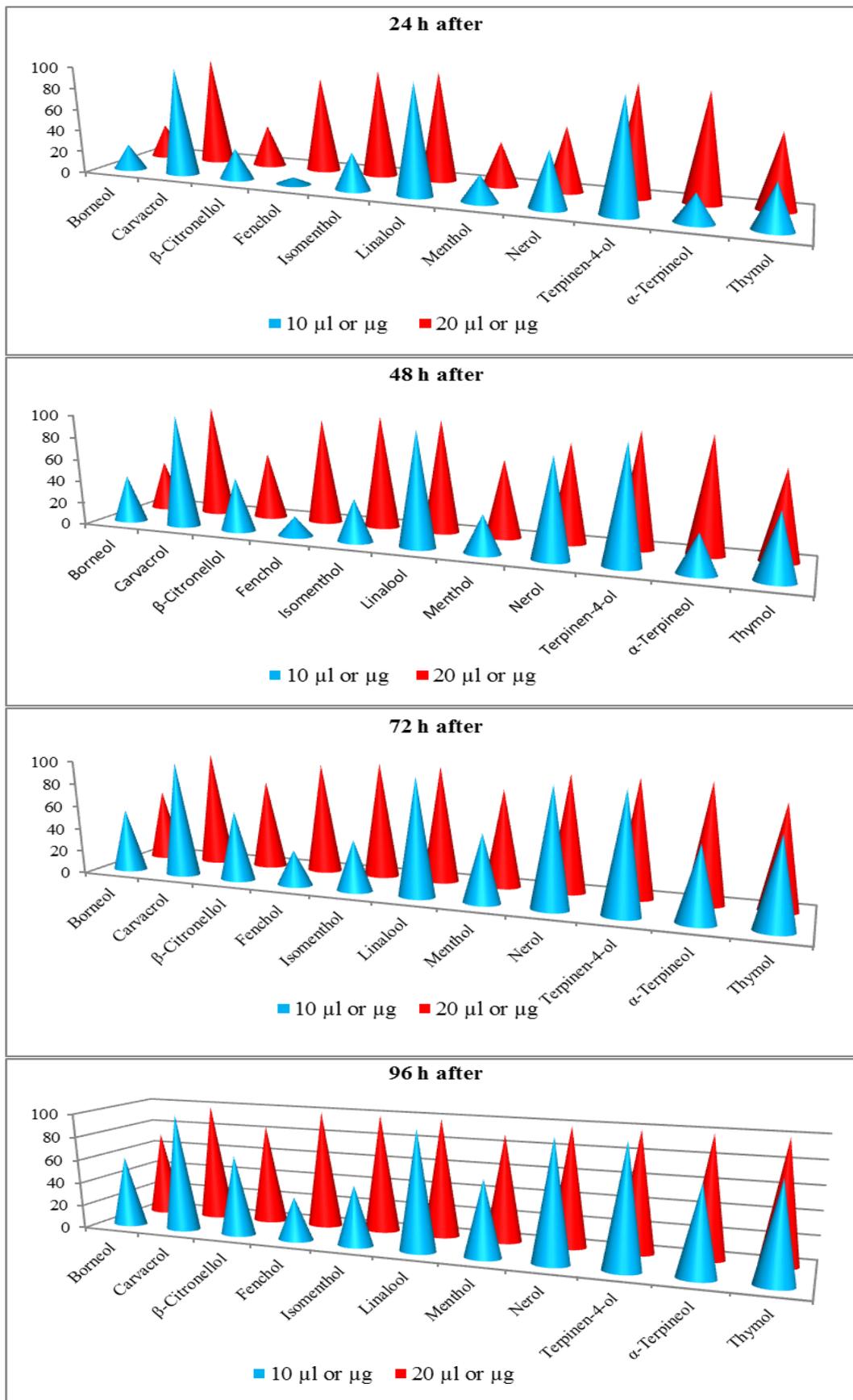
Carvone



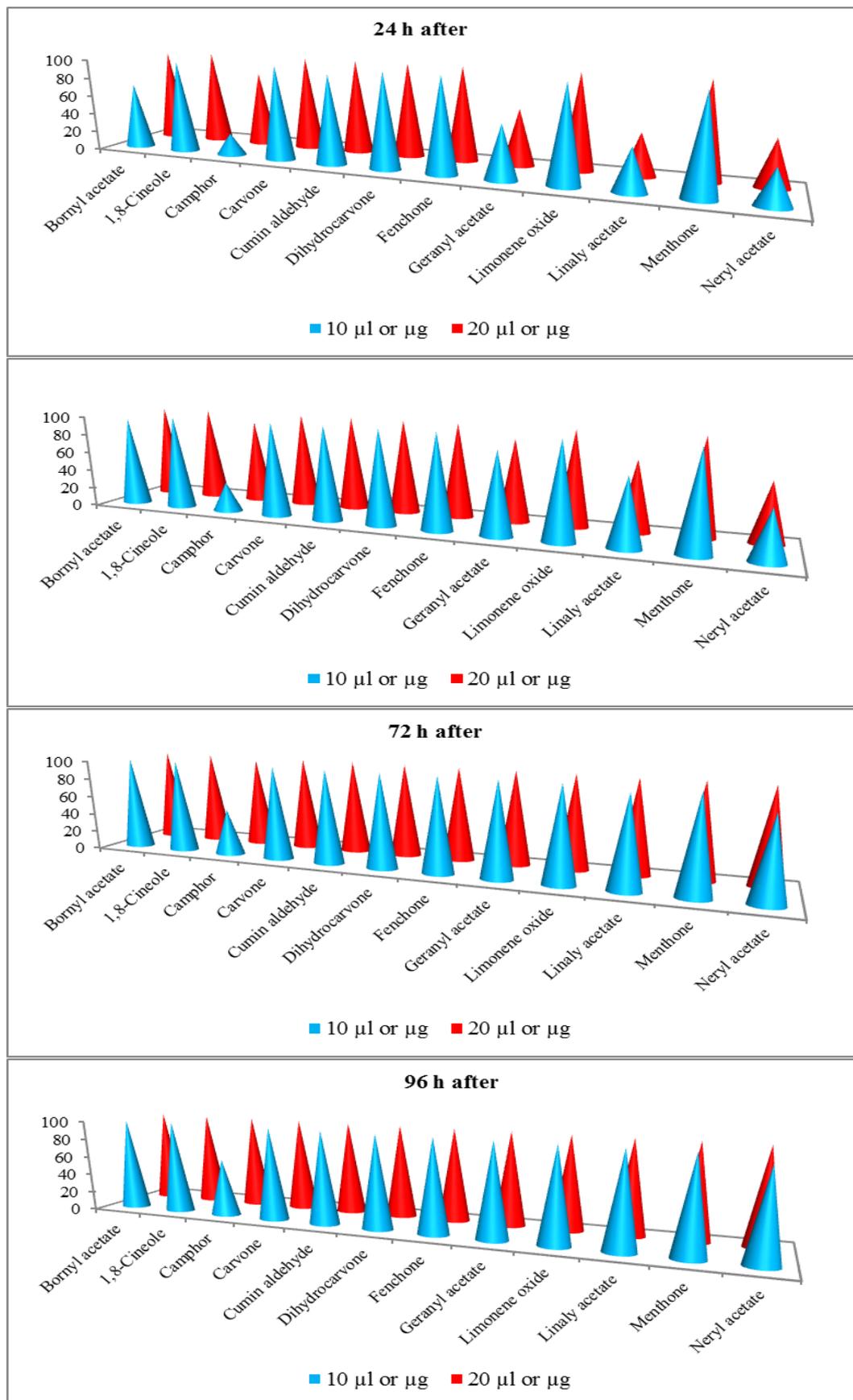
**Figure S1.** The chemical structures of monoterpenes and aromatic compounds tested insecticidal activities against *S. granarius* adults.



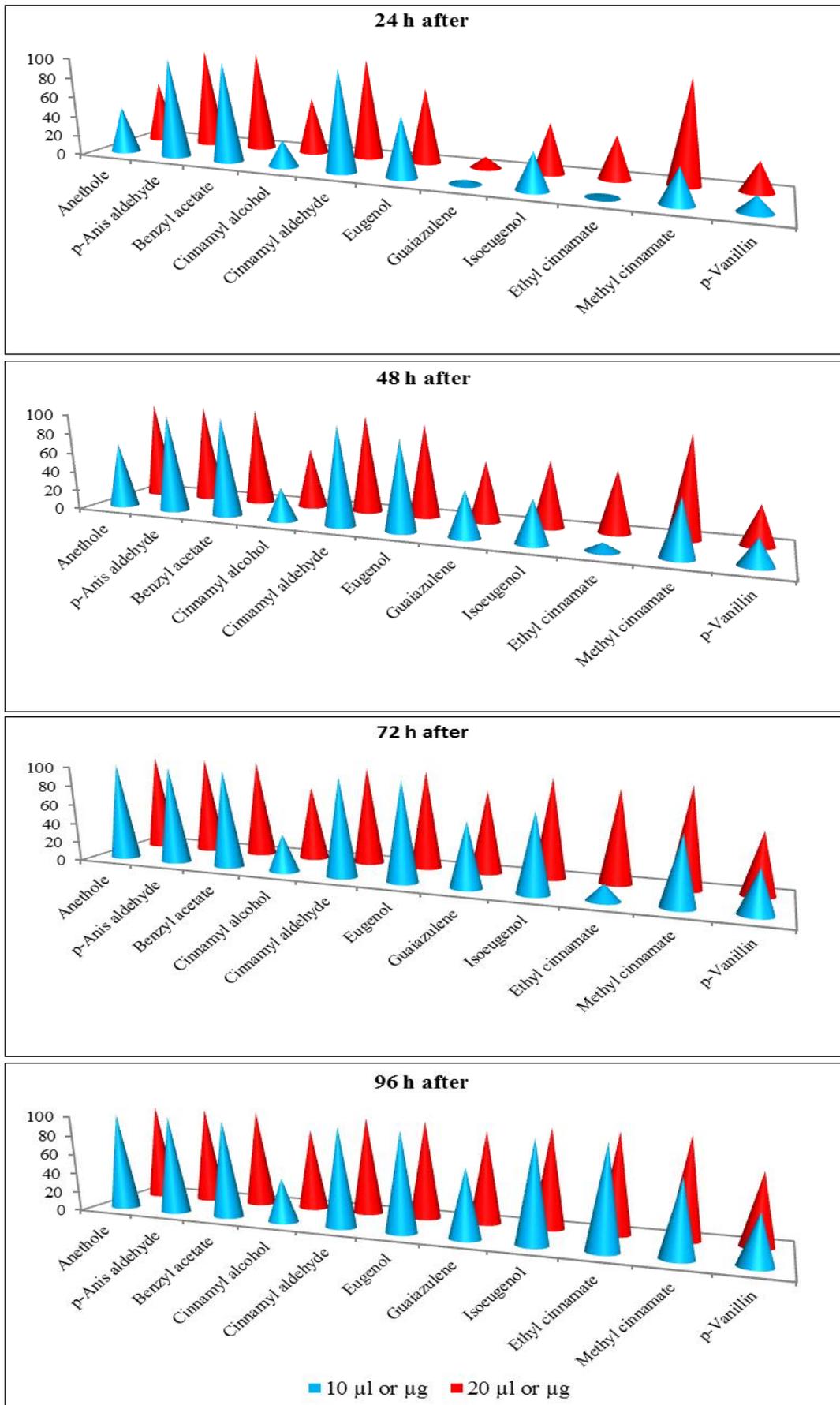
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**Figure S3.** Mortality (%) of adults of *S. granarius* (L.) after treatment with the alcohol derivatives of the oxygenated monoterpenes.



**Figure S4.** Mortality (%) of adults of *S. granarius* (L.) after treatment with the epoxides, ketones, aldehydes and esters derivatives of the oxygenated monoterpenes.



**Figure S5.** Mortality (%) of adults of *S. granarius* (L.) after treatment with volatile aromatic compounds.