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甘遂不同炮制品及提取物对斑马鱼的急性毒性研究

Acute Toxicity of Different Processed Kansui and its Extrats on Zebrafish

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英文关键词: [Kansui](#) [different processed products](#) [extracting method](#) [zebrafish](#) [acute toxicity](#)

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中文摘要:

目的 以模式生物斑马鱼为实验对象, 评价甘遂不同炮制品及提取方法的急性毒性。方法 采用回流提取方法制备甘遂不同炮制的水提液和醇提液; 将它们的提取液按几何级数设置浓度梯度, 添加到鱼生活的水中, 观察给药后96 h鱼只的死亡情况, 以此为判断药物毒性大小的依据, 采用SPSS Statistics 17软件计算不同炮制品水提液和醇提液对斑马鱼的半数致死浓度(LC₅₀)。结果 斑马甘遂不同炮制品的水提液和醇提液均表现出急性毒性反应, 且毒性作用呈现出明显的量-毒关系; 不同炮制品水提液LC₅₀明显高于醇提液; 同一提取方法不同炮制品的急性毒性大小顺序为甘遂生品>清炒品>醋润品>醋炙品。结论 以斑马鱼作为实验动物, 甘遂生品水提液急性毒性最强、甘遂醋炙品的水提液急性毒性最低。本实验为进一步认识与评价甘遂毒性及醋炙减毒机制提供了依据。

英文摘要:

OBJECTIVE To evaluate the acute toxicity of different processed kansui and its extraction on the model organ: zebrafish. METHODS Different processed kansui water extracts and alcohol extracts were prepared by reflux extracting method. The death of zebrafish was observed after exposure for 96 h to different processed kansui extracts with different concentration stages, which was the judgment for drug toxicity basis. The half lethal concentrations (LC₅₀) of different processed kansui extracts on zebrafish were calculated by SPSS Statistics 17. RESULTS Zebrafish in different processed kansui extracts all had acute toxicity reaction and showed apparent dose-toxicity relationship. Different processed kansui water extracts were significantly higher than alcohol extracts. Their order of toxicity high to low was: the crude kansui, simple stir-baking kansui, kansui infiltrated with vinegar, and kansui stir-bake with vinegar. CONCLUSION With zebrafish as experimental animals, the crude kansui alcohol extract shows the highest toxicity, whereas kansui stir-baked with vinegar water exteact is lowest. The results provide evidence for the further understanding and evaluation on the toxicity of kansui and attenuated mechanism after vinegar processing.

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