

# 三氧化二砷(As<sub>2</sub>O<sub>3</sub>)对蚕豆根尖微核率和果蝇发生量的影响

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**摘要** 目的: 研究不同浓度As<sub>2</sub>O<sub>3</sub>对蚕豆胚根根尖微核率和果蝇发生量的影响作用。方法: 以蚕豆根尖和果蝇为实验对象, 均用不同浓度As<sub>2</sub>O<sub>3</sub>处理, 采用蚕豆胚根根尖微核实验和果蝇培养实验。结果: 不同浓度As<sub>2</sub>O<sub>3</sub>可使蚕豆根尖细胞微核率和果蝇发生量明显上升。结论: 三氧化二砷(As<sub>2</sub>O<sub>3</sub>)对蚕豆根尖具有明显的毒性效应; 在一定条件下, 对果蝇发生量有促进作用。

**关键词** [As<sub>2</sub>O<sub>3</sub>](#); [微核率](#); [果蝇发生量](#)

## EFFECT OF As<sub>2</sub>O<sub>3</sub> ON THE RATE OF MICRONULEUS OF VICIA FABA ROOT TIP CELLS AND REPRODUCTION QUANTITY OF FRUIT FLY

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**Abstract** Purpose: In this study Vicia faba root tip and fruit flies were used as experimental subjects, effects of different concentrations of As<sub>2</sub>O<sub>3</sub> on the micronucleus frequency of vicia faba root tip cells and reproduction quantity of fruit flies were studied. Methods: The micronucleus test of vicia faba root tip cells and culture of fruit flies were performed. Results: The different concentrations of As<sub>2</sub>O<sub>3</sub> can induce high frequency of micronucleus and increase reproduction quantity of fruit flies. Conclusion: The results showed that As<sub>2</sub>O<sub>3</sub> has cytogenetic toxic effect on the root tip cells of Vicia faba, and has accelerating effect of reproduction quantity of fruit flies.

**Keywords** [arsenic trioxide](#) [micronucleus frequency](#) [reproduction quantity of fruit flies](#)

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