

研究简报

辣椒植株水浸提液对生菜和大白菜化感作用的研究

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摘要 以生菜和大白菜两种蔬菜为受体, 通过测定辣椒植株水浸提液对两种蔬菜作物种子萌发和幼苗生长的影响, 对辣椒化感物质的作用进行了研究。结果表明: ①低浓度 (0.01 g/mL) 的辣椒水浸提液对生菜和大白菜种子发芽率、发芽指数、幼苗根长和苗长均表现为促进作用; ②高浓度 (0.03 g/mL, 0.04 g/mL) 的辣椒水浸提液对生菜和大白菜种子发芽率、发芽指数、幼苗根长和苗长均表现为抑制作用。随着浓度的加大, 抑制作用增强; ③浓度为 (0.02 g/mL) 的辣椒水浸提液对生菜的种子发芽率、发芽指数、幼苗根长、苗长和大白菜的根长有明显的抑制作用, 而对大白菜的种子发芽率、发芽指数、幼苗苗长有促进作用。

关键词 [辣椒](#); [化感作用](#); [种子萌发](#); [幼苗生长](#)

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Allelopathic Study on Aqueous Extract From Hot Pepper Plant on Lettuce and Chinese Cabbage

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Abstract

Allelopathy of hot pepper plant were studied by measuring the seed germination and seedling growth with Chinese cabbage and lettuce watered with the aqueous extract of hot pepper plant. The results were following: ①Lower concentration (0.01 g/mL) of hot pepper plant aqueous extract has strong stimulating effect on the seed germination rate, germination index, seedling root length and shoot length of Chinese cabbage and lettuce; ②Higher concentration (0.03 g/mL, 0.04 g/mL) of hot pepper plant aqueous extract significantly inhibited the seed germination rate, germination index, seedling root length and shoot length of Chinese cabbage and lettuce; ③The 0.02 g/mL of hot pepper plant aqueous extract showed obvious effects on seed germination and seedling growth of the two vegetables: inhibiting the seed germination rate, germination index, seedling shoot length of Chinese cabbage, stimulating those of lettuce, and inhibiting seedling root length of two vegetables.

Key words [hot pepper](#) [allelopathy](#) [seed germination](#) [seedling growth](#)

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