

**ALLELOPATHIC ACTIVITY OF CURRY (*Murraya  
koenigii*) LEAVES EXTRACTS AGAINST JUNGLE RICE  
(*Echinochloa colona*)**

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## ABSTRACT

### ALLELOPATHIC ACTIVITY OF CURRY (*Murraya koenigii*) LEAVES EXTRACTS AGAINST JUNGLE RICE (*Echinochloa colona*)

Jungle rice or scientifically known as *Echinochloa colona* is a  $C_4$  yearly species that grows in every part of tropics and is the world's most consequential grass weeds. *Murraya koenigii* belongs to the family Rutaceae is a tropical to sub-tropical tree that are commonly known as curry patta in India. Curry leaves is one the main spices that have been consumed in India for its aroma and characteristic flavour. Curry leaf consists of coumarins, terpenoids, essential oils, carbazole alkaloids, vitamins,  $\alpha$ -tocopherols,  $\beta$ -carotene, and lutein, with documented antioxidant. Jungle rice is a serious wild grass as it can reduce the yield in the crop production. The objectives of this experiment is to determine the allelopathic activity of curry (*Murraya koenigii*) leaves extracts against jungle rice (*Echinochloa colona*) and to determine the best concentration of curry (*Murraya koenigii*) leaves extracts against jungle rice (*Echinochloa colona*). 5, 7.5, 8.5, and 10% of dried curry leaves were used as extraction in the experiment. Based on the results obtained, curry leaves extraction does shows inhibition and reduced the growth of jungle rice and paddy. There are no growth of jungle rice observed in 8.5% and 10% curry leaves extraction. Paddy does grow in the same curry leaves extraction however, reduction or alteration of radicle does occur in the paddy. It can be conclude that curry leaves does have allelopathic activity against jungle rice and 8.5% and 10% of curry leaves extraction will be the best concentration to inhibit the growth of jungle rice.