

عنوان مقاله:

Priming of prosopis cineraria (L.) druce and acacia tortilis (forssk) seeds with fulvic acid extracted from compost to improve germination and seedling vigor

محل انتشار:

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خلاصه مقاله:

Composting of waste plant materials and its use in agriculture and landscape sites is an environmental friendly way of reducing waste material and conserving the environment. In this perspective, we have taken the initiative at the Dubai based International Center for Biosaline Agriculture to compost the plant based waste material (lawn cuttingsgrass) to compost. The material was inoculated with a consortium of microbes leading to the formation stable and mature compost with high organic matter (38%). In order to conduct seed germination tests, fulvic acid was extracted from thecompost. A pot experiment was conducted over a period of 30 days in the green house to study the effect of fulvic acid on the seed germination, and plant growth ofProsopis cineraria (L.) druce (Ghaff) andAcacia tortilis (Forssk.) Hayne. Seeds of both trees were treated with fulvic acid at 0.5% and 1% concentrations water treatment was used as control. Generally seed germination and biomass were increased at both rates of fulvic acid application, However, a pronounced increase was found in seed germination when fulvic acid was used at 1.0% (Prosopis cineraria 27%; Acacia tortilis 20% increase over control). Similarly biomass (shoot and root) of A. tortilis and P. cineraria showed an .increase of increase 34% and 94% respectively

کلمات کلیدی:

Acacia tortilis, Biomass, Pant growth, Prosopis cineraria, Seed germination

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