

## عنوان مقاله:

Growth and proximate composition of *Amaranthus cruentus* L. on poor soil amended with compost and arbuscular mycorrhizafungi

## محل انتشار:

مجله بین المللی بازیافت مواد آلی در کشاورزی، دوره 6، شماره 3 (سال: 1396)

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## خلاصه مقاله:

**Purpose** The study was carried out to examine growth, shoot yield, dry matter and proximate composition of *Amaranthus cruentus* on poor soil augmented with compost or AMF either singly or in combination. **Methods** The experiment was arranged in completely randomized design in six replicates with four treatments. Four treatments: comprised control and three other amendment types derived from the application of compost made from cattle dung and maize stover, arbuscular mycorrhizafungi singly or in combination with compost. The treatments were applied a week before sowing to allow for proper mineralization. Growth characteristics, chlorophyll content, ascorbic acid content and proximate composition were assessed. **Results** The results revealed that the compost supplied sufficient plant nutrients needed for improving biological and economic yields of *Amaranthus cruentus*. Application of compost significantly ( $P < 0.05$ ) influenced growth, dry matter and fresh shoot yield of *A. cruentus*. Applying of combination AMF and compost to nutrient limiting soil had no significant ( $P > 0.05$ ) effect on yield and yield components of *A. cruentus*. Proximate composition of *A. cruentus* was significantly enhanced in pots augmented with compost better than pots amended with the combination of AMF and compost. **Conclusions** Application of compost to nutrient deficient soil promoted growth, fresh shoot and dry matter yield of *A. cruentus*. Similarly, proximate composition of the crop was appreciably influenced by compost application.

## کلمات کلیدی:

*Amaranthus cruentus* AMF Compost Proximate composition

## لینک ثابت مقاله در پایگاه سیویلیکا:

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