

## عنوان مقاله:

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## محل انتشار:

سومین کنفرانس بین المللی علوم کشاورزی، محیط زیست، توسعه شهری و روستایی (سال: 1398)

تعداد صفحات اصل مقاله: 15

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## خلاصه مقاله:

To investigate combined effect of nitrogen and mycorrhiza under water deficit stress on the purslane, a factorial split experiment based on a randomized complete block design with three replications was conducted in a semi-arid region of Iran in 2015 and 2016. The main plots were factorial combination of two irrigation conditions (non-stressed control and stressed condition) and two treatments, i.e. control and inoculation with arbuscular mycorrhiza fungi (AMF, *Rhizophagus irregularis*). The subplots consisted of unfertilized control, 100% farmyard manure (8.5 Mg FYM ha<sup>-1</sup>), 100% N (120 kg urea ha<sup>-1</sup>), 75% FYM and 25% urea, 50% FYM and 50% urea, 25% FYM and 75% urea. In both of years, the drought stress reduced AMF colonization (by 30.3 and 15.3%), phosphorus content in purslane, while contributing to the production of saturated and unsaturated fatty acids. The AMF increased unsaturated fatty acid content of leaf in purslane. Application of nitrogen fertilizers enhanced phosphorus uptake and fatty acid contents of the leaf under both irrigation conditions. It can be stipulated that the treatments with mixed application of FYM, urea and mycorrhiza tend to not only produce the highest values for qualitative and quantitative traits, but also reduce the need for water and nitrogen fertilizer.

## کلمات کلیدی:

Colonization, Fatty acid, Manure, Urea, Water stress

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/977283>



