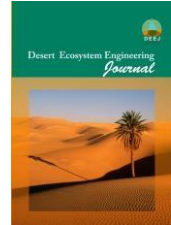




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Study of Pasture Species in Intercropping and Monoculture in SemiArid of Gonbad-e- kavous

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Abstract

Monoculture and polyculture is common in arid and semi-arid of many years in the world. In order to evaluate and compare the yield of mixed and pure range land species, this research was carried out of semi-Arid of Gonbad Kavous. The plan was designed complete Blok with three replications in crop year of 2012-2013. The treatments were with 5 levels of planting pattern included, *Festuca ovina* L, *Festuca arundinacea* Schreb, *Medicago scutellata* L, *Agropyron elongatum* Analysis of variance showed that planting pattern in forage yield and seed yield have significant effects (1%) Results showed that the highest yield was in mixed cultures by 2018.01 kg/ha and lowest yield by 416.96 kg/ha. The highest seed yield was 969.34 kg/a for *M. scutellata*. Comparison of means treatment showed that maximum of dry matter digestibility was for *M. scutellata* and cultures treated by 64.45 percent and at least some of traits of pure treatments by 49.54 percent (*A. elongatum*). Maximum crude protein was for *M. scutellata* pure cultures treated by 20.55 percent and minimum attribute the *F. ovina* monoculture treated with 11.83 percent. Maximum crude fiber was for *A. elongatum* with 46.39 percent and minimum treatment was for mixed cultures with 37.32 percent. Comparison of means treatment showed that ash forage cropping patterns to pure cultures of *F. arundinacea* treated with 9.83 percent and at least some of the traits of pure cultivation treatments of *M. scutellata* with 7.45 percent, Land equivalent ratio (dry matter basis) for the species equivalent of 1.18 of the LER > 1 indicates that the result has been a mixed culture is better than in pure culture.

Keywords: Semi-arid, mixed cultures, pure cultures, yield.

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