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Determination of relation between *Dorema ammoniacum* and *Rheum ribes* with some soil properties (Case study: Range of Baghedar region in Bafgh)

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Abstract

Identifying the ecosystem details of the range and the relations between these details including soil and vegetation, is Necessary for optimum management of the ranges. In order to determine the effect of some soil properties on distribution of *Dorema ammoniacum* and *Rheum ribes* in ranges of Baghedar region, the information about vegetation were harvested using systematic-random method in the form of 40 plots during 4 transects. After drilling soil profiles at the start and end of each transect and also sampling the soil by depth of 0-10 and 110-80 cm, the parameters pH, EC, CaCo3, organic carbon, CaSo4, Co3, Hco3, Cl, So4, Ca, Mg, Na, Fe, Cu and soil classification grain distribution was determined in the laboratory. Then Collecting the data for Analysis, Principal components analysis method was used. Finally, the results obtained by analysis of soil variables and vegetation showed that soil texture, CaCo3, EC, OC, CA, Mg, Cl and Na had the most impact on distribution of vegetation types and *Dorema ammoniacum* and *Rheum ribes*.

Keywords: Principal components analysis, Rheum ribes, Dorema ammoniacum, Baghedar, Bafgh.

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