

## عنوان مقاله:

Application of the MoDrY model for the estimation of potato yielding

## محل انتشار:

مجله تولید گیاهان، دوره 7، شماره 3 (سال: 1392)

تعداد صفحات اصل مقاله: 12

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## خلاصه مقاله:

The study was conducted with the application of the model MoDrY (Model-Dry periods-Yield) for the estimation of the level of potato yields on the basis of dry periods occurring during the particular periods between the phenological phases of the crop plant. A characteristic feature of this model, unlike most existing weatheryield models, is that the principle of its operation is based only on information on the occurrence of precipitation. In the study the authors used research material from the years 1971-1983 and 1985-1996 (25 years) and diurnal sums of atmospheric precipitation from the same periods. Five interphase periods were adopted for the analyses: planting-emergence, emergence-lateral shoots, lateral shoots-start of blooming, start of blooming-haulm drying, haulm drying-harvest. The authors also used a model of changes in the resources of water available for plants during dry periods. Six measures were adopted to characterise the error of approximation: coefficient of correlation, coefficient of determination, mean relative error, RRMSE, EF and CRM. The coefficient of correlation obtained was at the level of 0.92 and the mean relative error at the level of 9.27%. Validation was performed by means of the Cross Validation test (CV), version .LOO

## کلمات کلیدی:

potato, Dry periods, Phenological phases, Weather-yield model, MoDrY

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