The effect of several fertilizer types on the wheat, corn and soybean crops in long term experiments at ARDS Caracal

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Among the oldest long term experiments from our country, on the first place is the experiments begun in 1965 at ARDS Caracal that continues in present. These experiments comprise a crop rotation formed of three crops, wheat, corn and soybean with different fertilization systems. The results obtained in the last three years within this experiment are presented in this paper. With the wheat crop on P0 background there was noticed that the yield was between 23.73 and 39.46 q/ha. When applying 200 kg n/ha the yield differences ranged between 8.71 q/ha with N0 and 15.73 q/ha with N200 resulting a yield output of 36.7 – 66.3%. With the corn crop, on P0 background the yields are between 41.17 q/ha (N0) and 63.38 q/ha (N200). With the soybean crop, on P0 background, as a result of nitrogen fertilizers applying the yield has recorded an increase between 11.7 q/ha when not fertilized to 18.6 q/ha with N120. The yield differences have been of 1.46 q/ha (N30), 2.54 q/ha (N60) and 5.16 q/ha (N120).