THE INFLUENCE OF CROP ROTATION AND FERTILISATION TO 
PYRENOPHORA TRITICI REPENTIS f. c. Drechslera (Helminthosporium 
tritici repentis) PATHOGEN ATTACK AND TO FLAMURA 85 
CULTIVAR YIELD IN S.C.D.A. SIMNIC CRAIOVA AREA

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Key words: crop rotation, wheat, pathogens, yield

SUMMARY

The crop rotation effect to soil fertility evolution is some time unobserved. It can be observed only in long time experiences. The crop rotation effects are favourable reflected to quantity and quality production.(Budoi și Penescu,1996).

The researches were effectuated in S.C.D.A. Simnic Craiova area in 2006-2007 to Flamura 85 cultivar. The experience was realized in Agrotechnics laboratory using divided lots and it has two factors with 5 graduations: a1 -wheat after wheat (one-crop system); a2 -wheat after maize; a3 -wheat after pea; a4 -wheat after sun-flower; a5 -wheat after maize and B factor with 5 graduations: b1 -unfertilized; b2 -N100; b3 -P60; b4 -N100P60; b5 -20t/ha manure

2006-2007 was unfavorable for wheat, because it was a drought year and the average value of monthly temperatures was with 2,7 bigger than many years monthly average. The plants highness in all five rotations changed to 50,2 cm in one-crop system to 78,7 cm in four years rotation wheat after maize. De lowest wheat plants were in one-crop system using all fertilizers of the experience and the highest wheat plants were in four years rotation wheat after maize (68,1cm-78,7cm).Ear seeds number is limited in case of one-crop system and higher in 3-4 years rotation, especially using N100P60. The hectoliter mass is affected of applied fertilizer products, in unfertilized variants values were 72,0 in one-crop system and 76,0 in four years rotation. The fertilizer products induced the increase of hectoliter mass using all doses of fertilizers and rotations. The only one pathogen which was determinated to wheat in 2007 was Pyrenophora tritici repentis anamorph Drechslera (Helminthosporium tritici repentis).The highest attack degree 22,23 was noticed in four year rotation wheat after pea using 100 KgN/ha. Another significant attack degree value was noticed in four year rotation wheat after maize 20,5%, using N100P60. Other significant attack degrees were determined in four year rotation wheat after sun-flower (16,77%) and 15,15% in two year rotation wheat after maize using N100. The climatic conditions especially drought, had a significant influence of these aspects and induced a higher plants sensibility to Pyrenophora tritici repentis anamorph Drechslera (Helminthosporium tritici repentis). The biggest yield was obtained in four year rotation wheat after sun-flower, 33,4q/ha using N100P60 fertilizer and 32,2 q/ha using 20 t manure fertilizer.

BIBLIOGRAPHY