## EFFECTIVENESS OF DIFFERENT SYSTEMS OF PROTECTION OF A POTATO AGAINST LATE BLIGHT AND AN ALTERNARIA F. S. Melnichuk, Candidate of Agricultural Sciences Institute of Water Problems and Melioration NAAS

The article deals with the data of given spreading and development of diseases on potato fields in Forest-zone. The assessment of effectiveness of different systems of measures against an alternaria and late blight were introduced. It is established, that use of technologies of protection of firms BASF and Kraft allowed constraining effectively development and spreading of these diseases at economically tolerant level.

## Fungicides, potato, illnesses, norm of expense, efficiency

In 2009, during the surveys and the first signs of blight on experimental plots were observed in the first decade, and in 2010 - in the second decade of June, which is associated with loss of a significant amount of precipitation during May - June, which exceeded the monthly norm of 1, 5 -2 times, and the content of the warm weather, so the use of fungicide treatments were performed at the same time against a complex of these diseases. During the growing season on potatoes multiplicity of treatments with fungicides was 8 times, which was consistent with the scheme of experience.

As a result of surveys revealed that the different varieties of potatoes differently reacted to the use of fungicides, which manifested itself in a non-uniform intensity of the spread of disease in the individual variants of the experiment. It is worth noting that the plant variety Lady Rosetta in the application protection system f. BASF on the average for 2009-2010. At least 1,3-7,5% spotting than when using the system Kraft. This contributed to a better development of the plant culture and the preservation of their assimilation surface. On grade Opal observed exactly the opposite-Tend - protection technology Kraft more on 1,9-8,1% effective control of phytopathogens. In general, despite the treatments potato plants highly effective

fungicides different mechanisms of action that inhibits and slows the progression of disease, spread of late blight and on the investigated varieties reach the maximumminimum (100% destruction of potato plants) in 2009. - In the second decade, and in 2010. - In the third decade of July.

## References

1. Богданович С. В. Оцінка токсичної дії фунгіцидів проти збудника альтернаріозу картоплі / С. В. Богданович, В. Г. Сергієнко // Захист і карантин рослин : міжвідомчий тематичний науковий збірник. – К. – 2008. – Вип. 54. – С. 58–63.

Сергієнко В. Г. Без збільшення норми витрати: Ефективність різних схем захисту картоплі від фітофторозу / В. Г. Сергієнко, Л. П. Калінчик // Карантин і захист рослин. – 2005. – № 5. – С. 25–27.

3. Applied Biotechnology to Combat Late Blight in Potato Caused by Phytophthora Infestans / A. J. Haverkort, P. C. Struik, R. G. F. Visser, E. Jacobsen // Potato Research.  $-2009. - N_{2} 52. - P. 249-264.$ 

4. Голячук Ю. С. Життєвий цикл гриба Phytophthora infestans (Mont) de Bary збудник фітофторозу картоплі в умовах Західного Лісостепу України / Ю. С. Голячук, М. П. Лісовий // Карантин і захист рослин. – 2009. – № 11. – С. 12–15.

Методики випробування і застосування пестицидів / [С. О. Трибель,
Д. Д. Сігарьова, М. П. Секун та ін.]. – К. : Світ, 2001. – 448 с.