**Abstract**
Sunflower is the most imporant oil crop grown in Romania, with wide use in the food and industry sector. The fungus Sclerotinia sclerotiorum (Lib) de Bary, is a class Ascomycetes, order Heliotiales, family Sclerotinacea. The disease causes economic losses in entire world, particulary the culture on sunflower, Helianthus annuus, was the object of research and disease for decades (Gulya et al., 1997). Sclerotinia sclerotiorum (Lib. de Bary) was described in 1837 by Libert and indentified by Fuckel in 1861(Purdy) is the fungus that causes the most damage up to 100% in many cultures(Sackston, 1992). In all temperate climates regions in the world, white rot disease is the most important, because the fungus remains in the ground,for a period of many years, and range of host plants. This fungus attacks various organs of the plant, the root, stem, leaveas, and head root. This fungus is a parasite polifag which attack over 400 plant species belonging to 75 botanical families, of which many species are plants of cultura of a particular importance in agricultura (sunflower, rapeseed, soybeans) (Boland and Hall 1994). For developing hybrids with genetic resistance, we must reduce the loss caused by this pathogen. The objective in this study was to test some sunflower hybrids under Ezăreni farm with resistant pathogen attack.

**Key words**: sclerotinia, *Helianthus annuus*, artificial infection