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SENSITIVITY OF *CERCOSPORA BETICOLA* ISOLATES IN 2015 IN SERBIA

ABSTRACT

Cercospora leaf spot (CLS) caused by the hemibiotrophic fungus *Cercospora beticola*, is sugar beet disease primarily controlled with fungicides. However, an exclusive use of fungicides which belong to the same class of fungicides with site-specific mode of action creates a pressure under which resistant isolates within a population become predominant. The aim of this research was to determine the sensitivity level of *C. beticola* isolates from the site on which CLS was controlled solely by strobilurin fungicides (azoxystrobin or trifloxystrobin) in combination with triazoles (mostly cyproconazole) during the previous 5 years. Qualitative sensitivity of *C. beticola* isolates was tested by measuring mycelial growth on media amended with discriminative concentrations of carbendazim (benzimidazole), azoxystrobin (strobilurin) and tetraconazole (triazole). Concentrations that were used are: 5 µg/ml of carbendazim, 0.1 µg/ml of azoxystrobin + 1mM salicylhydrooxamic acid (SHAM) and 0.6 µg/ml of tetraconazole and were established based on testing wild type populations of *C. beticola* obtained from typical symptoms of CLS on chard and beet from organic production. Results showed that decrease of sensitivity of *C. beticola* to tetraconazole and azoxystrobin exists in populations, whereas only a small proportion of isolates showed resistance to carbendazim from the benzimidazole group.
