Utjecaj prakse navodnjavanja na intenzitet latentne zaraze paunovim okom *Spilocaea oleagina* (Castagne) Hughes na sorti Coratina

Tomislav Kos, Zoran Šikić, Marko Zorica, Šimun Kolega, Šime Marcelić, Ana Gašparović Pinto

Odjel za ekologiju, agronomiju i akvakulturu, Sveučilište u Zadru, Trg kneza Višeslava 9, 23000 Zadar, Hrvatska (tkos@unizd.hr)

Sažetak

Najdestruktivnija bolest na maslini (*Olea europaea* L.) je paunovo oko koju izaziva gljiva *Spilocaea oleagina*, (Castage). Prvi simptomi se pojavljuju na listu. Patogen je prisutan u masliniku tokom cijele godine. Tijek inkubacije od 15 dana pa do nekoliko mjeseci otežava nadzor bolesti zbog pojave latentne zaraze. Uzgoj stabla masline u mediteranskom podneblju je na plitkom skeletnom tlu koje ima niski kapacitet za vodu. Za postizanje zadovoljavajućeg prinosa i kvalitete ploda maslinu je potrebno navodnjavati. Cilj rada je odrediti intenzitet i jačinu zaraze paunovim okom na sorti Coratina u sklopu projekta „SAN – Smart Agriculture Network“ na 24 stabla po slučajnom bloknom rasporedu. Navodnjavanje je provedeno sustavom kap na kap. Varijante su: K (0%) - bez navodnjavanja, T1 (PP) - proizvođačka praksa, T2 (SAN) – 80 % od izračunate evapotranspiracije i T3 (100%) – od izračunate evapotranspiracije. Za određivanje latentne zaraze po pojedinim varijantama pokusa ubrani listovi tretirani su natrijevom lužinom. Ocjenjivan je postotak zaražene površine lista razvrstane u pet kategorija. Statističkom obradom podataka jednosmjernom analizom varijance (ANOVA) i povratnim testom (Duncan) određen je postotak zaraženih listova i postotak pokrivenosti lisne površine lezijama. Dobiveni rezultati ukazuju da bez obzira na obrok navodnjavanja sve varijante u istraživanju imaju jednak broj zaraženih listova. S druge strane sve istraživane varijante imaju jednak prosječni postotak zaražene površine lezijama, osim varijante T3 gdje je on značajno veći.

Ključne riječi: latentna zaraza, maslina, navodnjavanje, paunovo oko, SAN

Impact of irrigtion practices on intensity of olive leaf spot *Spilocaea oleagina* (Castagne) Hughes on the Coratina variety

Tomislav Kos, Zoran Šikić, Marko Zorica, Šimun Kolega, Šime Marcelić, Ana Gašparović Pinto

Department of ecology, agronomy and aquaculture, University of Zadar, Prince Višeslav 9, Zadar, Croatia (tkos@unizd.hr)

Summary

Most destructive disease on olive trees (*Olea europaea* L.) is the olive leaf spot (OLS) caused by fungus *Spilocaea oleagina*, (Castage). First symptoms appear on the leaf. Fungus is present in the olive grove throughout the year. Incubation time from 15 days to several months make difficult to control the disease due to the occurrence of latent infection. Cultivation of olive trees in the Mediterranean climate is on shallow skeletal soil that has a low water capacity. To achieve yield growth and fruit quality, olive tree need to be irrigated. In this study, aim is to determine the incidence and severity of OLS infestation on Coratina variety within project "SAN - Smart Agriculture Network" on 24 trees according to a random block layout. Irrigation was carried out with a drip system. Treatments are: K (0%) - without irrigation, T1 (MP) - manufacturing practice, T2 (SAN) - 80% of evapotranspiration and T3 (100%) - of evapotranspiration. To determine the latent infection by individual variants of the experiment, the harvested leaves were treated with sodium hydroxide. Percentage of infected leaf area were classified into five categories. Statistical analyses of data by one-way analysis of variance (ANOVA) and return test (Duncan) determined the percentage of infected leaves and the percentage of leaf surface coverage by lesions. Obtained results indicate that regardless of the irrigation, all treatments in the research have the same number of infected leaves. Moreover, all investigated treatments have the same average percentage infected leaf with lesions, except variant T3 where it is significantly higher.

Key words: irrigation, latent infection, olive leaf spot, olive tree, SAN