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## PROIZVODNJA I DORADA SEMENSKOG KUKRUZA U 2020. GODINI

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U 2020. godini proizvodnja ZP hibrida zasnovana je na 1.422,65 ha. Najveći deo proizvodnje je ugovoren sa eksternim proizvođačima, dok je 20,3 ha bilo zasnovano na površinama Instituta ZP u Krnješevcima i Školskom dobru. Proizvodnja je zasnovana kod svih 12 eksternih proizvođača sa kojima je bila ugovorena i 2019. godine.

Klimatski proizvodna sezona nije bila idealna za proizvodnju semenskog kukuruza. Iako tokom godine nije bilo dugačkih perioda sa visokim temperaturama, u kritičnim fazama je bilo nedovoljno padavina. U početnim fazama razvoja (od setve do nicanja) je u mnogim regionima zabeležena nedovoljna količina padavina. U severnoj Bačkoj je u tom periodu beskišan period potrajan do prve polovine maja. Tada su nastupile obilnije količine padavina, praćene nižim temperaturama nego što su uobičajene za taj period. Sve je to uticalo na slabije sklopove i neujednačeno nicanje.

Svake godine se sve više pokazuje da je otežano kvalitetno uklanjanje metlica ukoliko se ne koriste samohodni sekači metlica (Kastriks), zato što je iz godine u godinu sve manje kvalitetne sezonske radne snage. To se naročito pokazalo u ovoj godini, na koju je dodatno uticala i globalna pandemija COVID-19. Svi eksterni proizvođači su ove godine u većoj ili manjoj meri koristili i Kastriks pri uklanjanju metlica.

Biljne bolesti su ove godine imale izraženiji uticaj nego prethodnih godina, naročito u pojedinim regionima. U centralnoj Bačkoj na jednoj lokaciji je zabeleženo 8% obolelih biljaka od plamenjače kukuruza (*Sclerophtora macrospora*). U poslednjih 10 godina tako nešto nije zabeleženo u proizvodnji semenskog kukuruza. Sve obolele biljke su uklonjene iz useva u fazi intenzivnog porasta, a nakon toga je usev tretiran preparatom Krilt (1 l/ha). Intervencija je bila uspešna i ostvaren je prinos od 3,35 t/ha. U zapadnoj Bačkoj je na više lokaliteta bila primetna velika šteta uzrokovanu mehurastom gari (*Ustilago maydis*). Procenat zaraženih klipova i vegetativnih delova biljaka je varirao između genotipova. Zadnjih nekoliko godina sve je veća pojava i treće generacije kukuruznog plamenca, ali s obzirom da svi proizvođači preventivno više puta tretiraju useve, nije zabeležena ni na jednoj izolaciji veća šteta.

Berba i sušenje semenskog kukuruza je obavljen u 7 doradnih centara. S obzirom da od septembra do početka oktobra gotovo da nije bilo padavina, berba je protekla bez većih zastoja. Prosečan prinos primarno dorađenog semena svih izolacija iznosio je 3,3 t/ha, dok je prosečna klijavost svih ispitanih partija semena 96,84%. Ukupno je proizvedeno 4.700 t primarno dorađenog semena.

**Ključne reči:** kukuruz, semenska proizvodnja, dorada semena

## MAIZE SEED PRODUCTION AND PROCESSING IN 2020

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In 2020, the production of ZP hybrids was based on 1,422.65 ha. The largest part of the production was contracted with external producers, while 20.3 ha were based on the fields of the Maize Research Institute in Krnješevci and Školsko dobro. Production was made with all 12 external producers with which it was contracted in 2019.

By climate production season was not ideal for the production of maize seed. Although there were no long periods with high temperatures during the year, there was insufficient rainfall in the critical phases. In the initial stages of development (from sowing to germination), insufficient rainfall was recorded in many regions. In northern Bačka, the dry period lasted until the first half of May. Then there were more abundant amounts of precipitation, followed by lower temperatures than usual for that period. All this affected lower plant density and uneven emergence.

Every year, it becomes more and more difficult to properly remove tassels if self-propelled detasseling machines (Castrix) are not used, because the quality of seasonal labor is decreasing year by year. This was especially evident this year, which was additionally affected by the global COVID-19 pandemic. This year, all external producers have to a greater or lesser extent used Castrix for detasseling.

Plant diseases have had a more pronounced impact this year than in previous years, especially in some regions. In central Bačka, 8% of infected plants with *Sclerophthora macrospora* were recorded at one location. In the last 10 years, something like that has not been noticed in the production of maize seed. All diseased plants were removed from the crop in the phase of intensive growth, and after that the crop was treated. The intervention was successful and the yield was 3.35 t / ha. In western Bačka, great damage was noticed at several localities caused by *Ustilago maydis*. The percentage of infected cobs and vegetative parts of plants varied between genotypes. In the last few years, the appearance of the third generation of corn borer has been increasing, but considering that all producers treat crops preventively several times, no major damage has been noticed on any of the isolations.

Harvesting and drying of maize seed was performed in 7 processing centers. Since there was almost no precipitation from September to the beginning of October, the harvest passed without major delays. The average yield of primarily processed seeds of all isolations was 3.3 t / ha, while the average germination of all tested seed lots was 96.84%. A total of 4,700 t of primarily processed seed was produced.

**Key words:** maize, seed production, seed processing