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Effects of silver nanoparticles and magnetic field on growth of fodder maize (Zea mays L)

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In order to study magnetic field and silver nanoparticles' effects on fodder maize (*Zea mays* L.), two experiments were conducted in 2008 and 2009. These experiments were done with seven treatments based on randomized complete block design with four replications. Treatments included (T1) Magnetic field and silver nanoparticles + Kemira fertilizer, (T2) Magnetic field and silver nanoparticles + Humax fertilizer, (T3) Magnetic field and silver nanoparticles, (T4) Kemira fertilizer, (T5) Librel fertilizer, (T6) Humax fertilizer, and (T7) Control. Results showed that fresh yield was the highest in T3 and T4 treatments. These treatments increased the maize fresh yield by 35 and 17.5 percentages in comparison to control, respectively. The dry matter yield of the plants exposed to magnetic field and silver nanoparticles was significantly higher than that one achieved by other treatments. Magnetic field and silver nanoparticles treatments (T3 and T1) showed the greatest ear percentage in plant and the lowest one found in T7 and T5 treatments. In general, treatments had more significant effects on studied traits of maize in 2008 than 2009.

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