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ETHANOL AS A POWERFULL WEAPON AGAINST SOYBEAN-PARASITIC NEMATODES/ O etanol como uma alternativa no controle de fitonematoides da soja. J.C.P SILVA<sup>1,\*</sup>; T.B.R COUTO<sup>1</sup>; F.H.V. MEDEIROS<sup>1</sup>; V.P CAMPOS<sup>1</sup>. <sup>1</sup>Departamento de Fitopatologia - Universidade Federal de Lavras - DFP / UFLA • Caixa Postal 3037 • CEP 37200-000 • Lavras MG. Email: julioufla@yahoo.com.br. Apoio financeiro pela FAPEMIG.

The potential of ethanol (EtOH) in high concentration as antimicrobial compound has already been shown by many works. Nevertheless, little is known of EtOH activities in plant-parasitic nematodes at lower concentrations. Based on recently published work regarding EtOH controlling root-knot nematodes in vegetables even at low concentrations, this study describes the potential of simple using of EtOH against two very important plant-parasitic nematode to soybean production in Brazil, the cyst nematode (*Heterodera glycines*) and the root-lesion nematode (*Pratylenchus brachyurus*). Aqueous EtOH solutions (5-70 %vol) were evaluated *in vitro* into Petri dishes by adding 2 ml of EtOH solution in 0,5 ml suspension of juveniles or eggs. After 24 hours of contact, the EtOH caused an acute nematicidal effect (100% mortality) against second-stage juveniles (J2) of *H. glycines* and reduced egg-hatching even at low concentrations. However, the nematicidal effect against juveniles and adults of *P. brachyurus* was just high from 20,0 %vol application, reaching 100 % mortality at 40,0 %vol. In glasshouse conditions, 40 ml of EtOH at 0; 5,0 and 40,0 %vol was superficially applied into the *H. glycines* infested soil of 2 L vases 3 days before the soybean seedling (10 days age) transplantation. There was a high decrease of eggs formation in the soybean root system when we applied EtOH at 40,0 %vol. As previous works have shown to root-knot nematodes in lettuce, the EtOH at 40,0 %vol is also very toxic to soybean plant-parasitic nematodes. The observed EtOH effects indicate its prospective use against soybean plant-parasitic nematodes.

**Key words:** Alcohol; Alternative control; Cyst nematodes; Root-lesion nematodes. .