



Journal

EVALUATE THE EFFECT OF APPLYING GARLIC AND ONION EXTRACTS TO IMPROVE THE GROWTH AND PRODUCTIVITY OF "LE CONTE" PEAR TREES AS NATURAL AGENTS.

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ABSTRACT

'Le Conte' pear trees were sprayed twice on first week of February at dormant bud stage after winter pruning and when the trees' flowering percentage reach 50% with twelve treatments during two seasons of 2014 and 2015 as the following (1) Water garlic extract at 15%. (2) Ethanolic garlic extract at 15%. (3) Ethanolic garlic extract after hexane extraction 15%. (4) Hexane garlic extract at 15%. (5) Garlic volatile oil extract at 4 %. (6) Water onion extract at 15%. (7) Ethanolic onion extract at 15%. (8) Ethanolic onion extract after hexane extraction 15%. (9) Hexane onion extract at 15%. (10) Onion volatile oil extract at 4 %. (11) Control (spraying with water only). (12) Hydrogen cyanamide at 3% (Dormex). Treatments were compared with control and chemical product of hydrogen cyanamide (Dormex). Results show that, all treatments earlier the date of budbreaking dormancy earlier than the control. Spraying garlic volatile oil extract at 4% (T5) and Ethanolic onion extract at 15% (T7) enhanced productivity and yield of 'Le Conte' pear trees while Spraying (T5) improve the quality and characteristics of pear fruits which grown under warm winter conditions in Egypt.

Key words: Budbreaking Dormancy , Flowering , Fruit quality, Garlic Extract , Onion Extract , Pear , Yield .