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**ABSTRACT BOOK**  
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THE EFFECTS OF A SECONDARY METABOLITES MIXTURE ON FEEDING PREFERENCE AND LARVAL GROWTH OF LYMANTRIA DISPAR L. (LEPIDOPTERA: LYMANTRIIDAE) Nurver ALTUN.....	76
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## CHARACTERIZATION OF COMMERCIAL DIESEL PARTICLE FILTER

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In this study, optical microscopy, SEM and XRD analyses of a commercial diesel particle filter (DPF) that is specifically to be used in diesel engines were carried out with the aim of identification of the manufacturing processes, determination of the chemical composition, and microstructural analysis. Macrostructural characterization of the DPF was carried out with an optical microscope. It was observed that the structure is cubic shaped with open and closed cells, which are evidencing an extrusion based manufacturing technique. SEM with SE-BSE-EDX detectors was used for the elemental analysis and microstructural determination. The results indicated that the structure consist of silicon and carbon elements. Microstructural analysis indicated that SiC particles is of the size range 10-50  $\mu\text{m}$  with a sharp edged morphology, and manufactured by solid state sintering. Finally XRD analysis indicated that the main phase of the DPF was SiC.

**Keywords:** Diesel Particle Filter, Characterization, Microstructure, Silicon Carbide.

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