



Evaluating of some plastic wastes in HDF production process

Tuba Külçe¹, Saim Ateş^{1*}, Çağrı Olgun¹

¹ Department of Forest Industrial Engineering, Faculty of Forestry, Kastamonu University, Kastamonu, Turkey

* Corresponding author: saimates@kastamonu.edu.tr

Abstract: Using plastic wastes in forest product industry is an attractive subject for evaluating the wastes and also for decreasing the environmental pollution. In this study; different types of plastic wastes, polyethylene terephthalate (PET), polypropylene (PP) and polystyrene (PS), etc., various characteristics, were determined the potential usability as a mixture material for wood fibers in the HDF boards. It is important that some values, especially water absorption (%), thickness swelling (%), modulus of elasticity (MOE), and bending strength (MOR) of producing boards, determine for the using areas. Consequently, it is possible to easily say that, the some plastic wastes will be usable in HDF production process for some mixture ratios and for some usage areas.

Keywords: HDF, Plastic wastes, Physical and mechanical properties