



Introduction of Wood-Based Composites and application of agricultural residues and garden pruning wastages in their manufacture

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Restriction of forest resources, raw material deficiency in wood industries and likewise, increasing consideration to recycling and exploit of agricultural residues, orchard pruning and urban green space, indicate the merit of these stuff as raw material substitute for above industries. In this paper, introduction of wood composites and their manufacturing process were studied. These composites were separately divided in five groups: 1-particleboard, 2-fiber board, 3-wood-plastic, 4- wood-cement and 5-wood-gypsum. Also, the suitable residue for each product was studied with respect to its advantages and defects. Finally, it was elucidated that, almost all of the residues and wastages are suitable for wood-based composites production. With respect to their considerable volume and low price, they result in an increase in value added, decrease the import and lead to self-sufficiency of country in wood-based composites production.

Keywords: Agricultural residue, Pruning waste, Composites, Particleboard, Fiberboard, WPC

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