



Defining Formaldehyde concentration emission from wood manufactured from pruning

Rita Mansour

Department of Basic Sciences, Faculty of Agriculture, Damascus University, Syria.

Abstract: Boards of wood was manufactured from pruning (*alhagi maurorum* l, *prosopis stephaniana*, common reed , pine , apple and *Gossypium* sp) , using urea- formaldehyde in percent of 12% as adhesive. Formaldehyde emission from those boards was defined by flask method after 24 hours by using spectrophotometer at extreme wavelength 412 nano meter .Exhausting ratio of all manufactured boards was under Europe norm (5 mg /100 dry weight), the highest ratio was (4.04 mg/ 100 dry weight) in *alhagi maurorum* l , the lowest one was (2.34 mg/ 100 dry weight) in *prosopis stephaniana*, while it was converging in common reed, pine, apple and *Gossypium* sp (3.73 ,3.39, 3.01, 3.29 mg/100 dry weight) consecutively. Therefore, boards of wood manufactured by pruning residues could be used to manufacture furniture and desks instead of throw it without getting environmental benefit as it is healthy.

Keywords: Formaldehyde emission, Boards of wood, pruning.

Rita Mansour /Int.J. ChemTech Res. 2016,9(1),pp 290-295.
