IMPACT OF PRESSING TEMPERATURE ON PHYSICAL AND MECHANICAL PROPERTIES OF PANELS MADE FROM PARTICLES OF RASPBERRY STEMS (*RUBUS IDAEUS* L.) AND GRAPE PRUNING RESIDUES (*VITIS VINIFERA* L.)

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ABSTRACT

The researches in the paper are directed to creating possibilities for production of particleboards on the basis of raw material form lignocellulosic agricultural residues, as well as to establish the impact of pressing temperature on physical and mechanical properties of particleboards.

Experimental three-layer particleboards from two types of particles (raspberry stems and grape pruning residues) were made in laboratory condition.

Water-soluble phenol-formaldehyde resin was used for particle bonding.

Panels' pressing temperature ranged from 150 to 190ºC.

The research results showed that increment of pressing temperature to certain extent has positive effect on physical and mechanical properties of the panels, i.e., water absorption and thickness swelling decrease, while bending strength and internal bond of the panel increase.

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