

TECHNICAL NOTES

FOREST PRODUCTS LABORATORY

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EFFECT OF DECAY ON PAPER-MAKING QUALITIES OF WOOD PULP

Clean groundwood pulp and pulp infected with molds and fungi have been used in recent comparative paper-making trials at the Forest Products Laboratory, Madison, Wisconsin. These trials showed that infected pulp was inferior to clean pulp in the following respects:

The infected pulp produced a very dirty sheet.

It required more sizing than the clean pulp.

It stuck to the couch and press rolls and gave trouble from excessive foaming.

Although groundwood pulp is usually considered too slow, the extreme freeness of the infected pulp caused difficulty in carrying the necessary amount of water on the paper machine to secure a good formation in the finished paper.

Based on the percentage of groundwood, the infected pulp used in the experiments yielded 10 per cent less finished paper than the clean pulp.

The strength of the finished paper was greatly reduced by the use of infected pulp. In a groundwood sulphite furnish, this decrease in strength would necessitate the use of a larger percentage of the more expensive sulphite pulp.