

Improvement of undesirable tree pre-drying chemical procedure in thinnings

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The paper analyzes results of birch and aspen pre-drying mechanical (girdling) and chemical procedure applications in mature stand cut as well as treatments of forest plantations and softwood and hardwood young forests in forest and forest steppe zones in West Siberia (Tumenskaya region).

Additional experiments with glyphosate, emasaphyre and glyphosinate ammonium applications for birch, aspen and Scotch pine pre-drying were conducted to improve forest chemical treatment in Siberian FES. High efficiency of glyphosate and emasaphyre applications in autumn aspen stem injections is highlighted.

Undesirable tree stem injection of condensed pasteous glyphosate and emasaphyre preparations with hatchet injector developed at the Siberian FES its application for discovery is submitted is described (МПК А 01 G 7/06).

The conclusions of the studies:

1. In conditions of extensive management and lack of transport access of West Siberia forests most real and reliable forest treatment of forest plantations and natural softwood-hardwood young forests to dispose of birch and aspen sprout vegetative regeneration is arboricide applications.
2. Injection of glyphosate and emasaphyre products in birch and aspen stems before cut and young trees over 4 cm in diameter is rather efficient.
3. Condensed pasteous arboricide applications with hatchet injector is more convenient and provide sanitation conditions in chwemical pre-drying of undesirable trees and same level of silvicultural efficiency as in traditional injection of glyphosate and emasaphyre preparations.
4. Autumn (september-october) glyphosate and emasaphyre injection ensures reliable aspen pre-drying and extends forest chemical treatment season.

Key words: girling, chemical pre-drying, injections, incisions, arboricides.