

STRATIFYING REPELLENT-TREATED PINE SEED

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Germinative capacity of loblolly, shortleaf, and Virginia pine may be seriously reduced if the seed is repellent-coated and then stratified when fresh. In contrast, cold storage for a few months may largely forestall damage from later repellent treatment and stratification.

These are indications from studies at Sewanee, Tenn., where fresh clean seed of the three species was compared by laboratory germination after being processed in various ways. The treatments, and their effects on germination, were as follows:

Seed treatment	<u>Germination</u>		
	<u>Loblolly pine</u>	<u>Virginia pine</u>	<u>Shortleaf pine</u>
Fresh, not stored; stratified 33 days:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Repellent applied before stratification	68	61	85
No repellent, but stratified.....	97	97	96
Cold-stored for 2 months; stratified 23 days:			
Repellent applied before stratification.....	85	98	92
No repellent, but stratified.....	91	94	91

The repellent coating was a mixture of 6 pounds of Arasan-75 and 0.8 pound Endrin-50 per 100 pounds of seed. Latex 512-R was the sticker; a little aluminum powder was added to make the seed easy to handle. Stratification was in moist sand at 38-40 F. Storage was in a household refrigerator, also at 38-40 degrees.