

A PROOF THAT GEOGRAPHIC ORIGIN AFFECTS GROWTH

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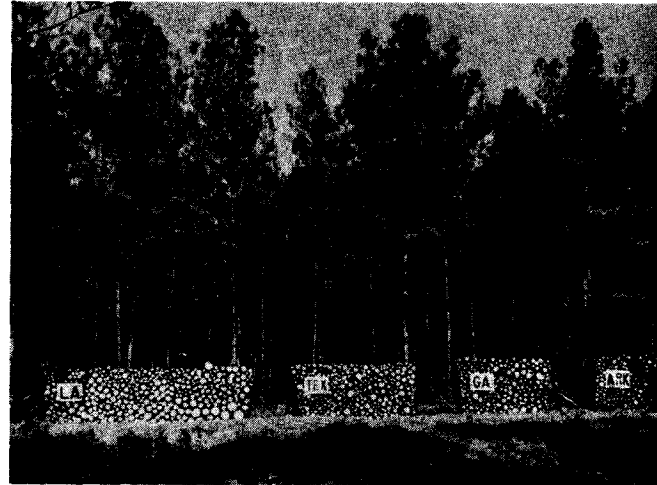
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Loblolly pine plantations at Bogalusa, La. , clearly show the benefits of using seed from local sources, at least for loblolly pine. In 22 years, trees from seed secured locally (Livingston Parish, 50 miles from Bogalusa) produced 41.8 cords of merchantable pulpwood per acre. Those from Montgomery County, Tex. , seed produced 22. 7 cords; those from seed from Clarke County, Ga., and Howard County, Ark., 17.7, and 15.4 cords, respectively.

The climate at the Texas seed source is similar to that at Bogalusa, but drier. The Arkansas and Georgia seed sources have lower average temperatures and shorter growing seasons than Bogalusa. The seed from all four sources were shipped to Bogalusa in the cone, extracted and sown in a nursery there. In the winter of 1926-27, the 1-year-old seedlings were planted at 6 x 8' spacing.

In the winter of 1948-49, trees from Louisiana seed averaged 46' in height and 6.7" d.b.h. Those from Texas seed ran second best, 41' high and 5.2" d.b.h. Trees from Georgia seed averaged 38' high and 5.2" d.b.h. Those from Arkansas seed were 36' high and 4. 7" d. b. h.

Survival was 82-84% for all except Georgia stock, which averaged 77%. The Georgia stock proved very susceptible to southern fusiform rust; 37% had stem cankers. Only 4-6% of the trees from other seed sources had such cankers.



Difference in volume

EFFECT OF GEOGRAPHIC SOURCE OF SEED

Seed source both pictures, L. to R. - La.  
(local); Texas; Georgia; Arkansas

Difference in height

