USE OF A MACHINE IN ALABAMA

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The advantages of mechanical tree planters are well known to those who operate them and to others who have inquired into their operation. In view of this I feel more inclined to comment on the faults and disadvantages and what we have done to alleviate them.

The sharp sand of the coastal area takes a heavy toll of coulters, middle busters and bearings. So far we merely replace parts as necessary. The small packing wheels at one time prevented planting in areas that were only slightly boggy -- a fault which we cured on one of the machines by installing wheels with 600 x 16 tires on an axle which supports packing wheels in soft areas. To protect the man on the planter from limbs and broken brush, we have extended a protective plate around his working area. Because most machines are cumbersome to turn at the end of the row, we try to lay out our planting with rows as long as possible. This saves considerable operating time. Our immediate problem is, to cut down on machine repair costs, but our long-range problem is to find some way to machine plant among dense stumps the year after cutting. The middlebuster type planter has definite limitations in such areas for it is difficult to operate satisfactorily in an area where stumps are so

dense as to prevent maneuvering. It could be that a dibble-type planter is the answer to this problem. We need something to obviate the long wait for stumps to decay.

We have used three types of power units to pull the machines, a small Cletrac crawler type tractor, a wheel-type, and a ${\tt TD6}$.

When the planting was done on dry, well-drained areas, the wheeltype tractor proved most efficient and was steadier in maneuvering through scrub oak and other brush. When the planting was done on low, wet soil or in areas which had been stumped, the track-type tractor worked to advantage.

Our results from machine planting are generally good. There have been cases of poor survival, but I believe this can be attributed to other factors such as site and climatic conditions.