

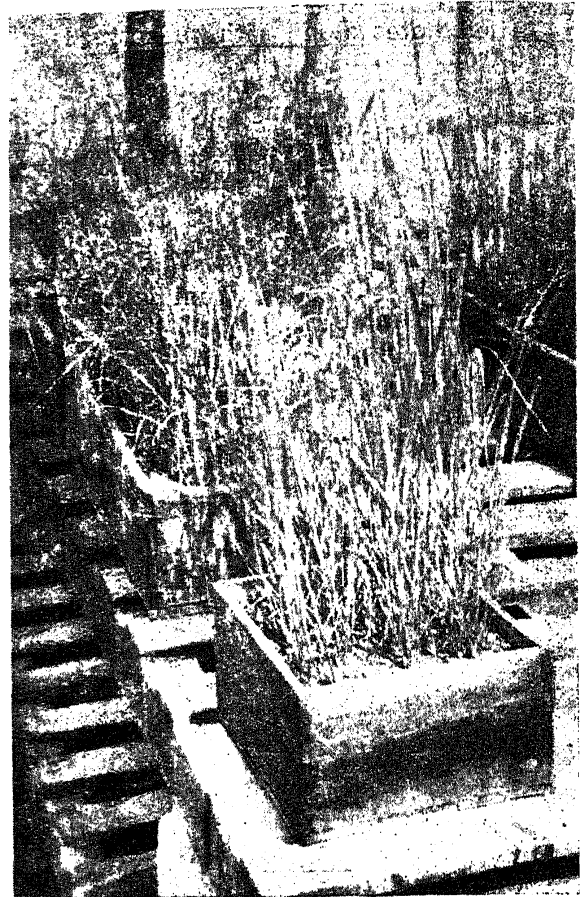
WOODEN PANS FOR SUGARCANE SEEDLINGS

In the September (1948) issue of the *Current Science*, Dutt, Rao and Davis reported a better output, growth and uniformity of sugarcane seedlings grown in glazed clay pans as compared to country-made earthenware pans. Our own experience with earthen pans in the Co. S. seedling work at Shahjahanpur was similar to that of the Coimbatore workers, but we have changed over to wooden pans, which we find very satisfactory. Pans made of dealwood were first tried by Dr. A. K. Mitra in 1942 for replacing some of the earthen pans broken in handling; these dealwood pans were found so promising that the writer made a complete change over to pans made of *Sal-wood* (*Shorea robusta* Gaertn.) in 1945; and our past four years' experience with the latter has more than justified the change from earthenware to wood. Our *Sal-wood* pans compare favourably with earthen pans (and presumably with glazed pans also), as may be seen from the statement below:—

	Truncated conical earthen pans	Square box-shaped wooden pans
Cross dimensions at top and outer edge ..	13 in.	12 in.
Cross dimensions at soil surface ..	11 in.	11 in.
Approx. weight per pan ..	9½ lb.	7½ lb.
Approx. area of soil surface per pan, available for sowing fluff ..	95 sq. in.	121 sq. in.
Approx. vol. of soil contained per pan ..	372 c. in.	635 c. in.

It will be seen from the above that, pan for pan, (1) wooden pans are 24 per cent. lighter in weight, (2) provide 27 per cent. more soil-surface for fluff and (3) hold 70 per cent. more soil for seedlings than earthen pans. On a given area of bench-space, wooden pans being square in shape with erect sides, provide more soil-surface than the earthen pans, which, being round and due to their sides diverging outwards, consume bench-space needlessly; the walls of wooden pans are also thinner. All said, with a change-over to wooden pans, we were able to effect a substantial increase in seedling output without addition to bench-space. Like glazed pans, these wooden pans also provide a uniform depth of soil for all the seedlings grown in the pan. In addition, wooden pans are easier to handle and breakages are negligible; repairs, if any, are simple and a matter of minutes. The cost as compared to glazed pans is very low (we paid a wartime rate of Rs. 1-12 per pan in 1944), and as there are practically no recurring costs and replacements, the cost of pans per year works out lower than with even country-made earthen pans. As is well known, *Sal-wood* does not rot through prolonged contact with water as other woods do, and a mere coating of coal-tar has been sufficient to keep off termites. We could have employed some of the new termitifuges

in the market, but this has not been found necessary here. As may be seen from the photograph, seedlings come up very well in these wooden pans, and in the writer's opinion,



wooden pans are better in every way than country-made earthen pans or factory-made glazed clay pans.

As regards the health and growth of seedlings, our experience is that the quantity of fluff sown per pan has a greater effect on the condition of the seedlings than the shape of the pan or the material of which it is made. At first we were also using 2 gm. of fluff per pan, but as the seedlings came up weakly and were rather under-developed at transplanting time, we reduced the rate to 1.5 and later to 1 gm. per pan, and this proved advantageous. Now we are sowing only 0.75 gm. of fluff per pan. It is possible, however, that in noble-cane crosses and other hybrid fluff of known low viability, the fluff rate can or should be higher. We had some *Phytophthora* damping off of seedlings, but we overcame this trouble by reducing the fluff-rate per pan and also by sterilizing the soil, which means merely stirring it in sunshine daily for a few days before preparing it for the pans.

As a result of all these improvements, we have not only considerably increased the seedling output, but have also reduced our transplanting mortality markedly. It would perhaps be worthwhile trying wooden pans in place of earthen pans, before changing over to glazed pans.

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