

PRESERVING ROUND FENCE POSTS ON THE FARM

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Many farmers want to know if on farm preservation of round fence posts is practical. The answer is yes.

Small diameter trees can be used as fence posts if the sapwood around the impermeable heartwood is impregnated with a preservative. Provided that the sapwood band is at least 12 mm thick, most hardwoods - Jarrah, Marri, W.A. Blackbut, Tasmanian Blue Gum - and radiata pine can be treated. Treated posts can last for 30 years or more.

Methods

CSIRO's Division of Forest Products have developed several methods of treating sapwood but methods using pressure or copper-chrome arsenic (CCA) are not practical on farms.

Creosote is the most practical preservative for on-farm use and it can be used in a number of ways.

HOT AND COLD BATHS involve heating the posts in steam, hot water or liquid preservative to drive out most of the air, followed by cooling in preservative. Treatment is best done using steam coils or low temperature electric elements in insulated tanks but 200 litre drums over an open fire have been used. If the preservative is flammable, great care is needed when using an open fire.

COLD SOAKING involves soaking the butt ends of the posts in creosote or other oil until they will absorb no more preservative and is suitable for dry radiata pine and low density eucalypt posts.

All you need is a tank and a draining platform alongside, with lifting gear for heavy posts or strainers.

SAP REPLACEMENT works best with water borne preservatives although it will work with creosote. The butts of freshly felled and debarked posts are immersed in a bath of the preservative until the level of the preservative ceases to drop.

To minimise the cost of treatment, posts should be as small as possible while providing adequate strength. Diameter under bark of 75 mm - 100 mm is probably adequate for ordinary posts but 150 mm-200 mm will be needed for gate and corner posts, provided these are at least 0.9 m in the ground.

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Posts need to be carefully debarked immediately before treatment, without damaging the sapwood. The posts should be cut when the bark can be easily removed.

For each treatment, posts should preferably be of the same species and of similar size. To determine the required treatment time, cut a section off the end of a post and examine it for penetration.

Creosote is an excellent preservative which also gives some protection against surface weathering and splitting but it must be handled with care.

It should not be used in an enclosed shed and you should wear protective clothing, full length rubber gloves and goggles when handling it.

Treated round posts can last in the ground for more than 30 years if you surround the heartwood with a complete barrier of insect and decay resistant sapwood. The wider the treated sapwood, the longer will be the life of the post.

For more information, contact me at CALM's Wood Utilisation Research Centre at Harvey on 291913.

