

SOME PRACTICAL ASPECTS OF CHEMICAL CRUTCHING

L. FERGUSON*, L. LAWS** and P. HOPKINS*

The high costs of conventional crutching represent a major economic burden to the Australian sheep industry. Chemical removal of wool has for many years been used by the felmongering trade. This paper reports on the recent developments in the use of chemicals to remove wool from the breech of live sheep.

A hydrosulphide solution (3% Na_2S , 0.5% NaOH , 2% wetting agent) when misted-onto the skin of the sheep causes a frank break in the wool at the skin surface. Wool from this treated area can be manually removed 30 - 60 sec. later. The sheep handling device, mister, and ancillary equipment for wool handling have been developed to enable the technique to be used on commercial properties. The practical aspects of the procedure are shown in the film.

Treatment with hydrosulphide produces a completely denuded area and affords a longer period of protection against blowfly strike than conventional crutching. Sheep may be radically crutched or channelled depending on prevailing circumstances. The portable nature of the equipment, the low capital cost of the mister (approx. \$250) and the low cost of chemicals (<1c/sheep) are other advantages of the system.

The wool harvested by this technique is partly scoured. It has been judged by the manufacturing trade as suitable for blending. On farm scouring could have some advantages with regard to pollution control, though the handling of wet wool and the resultant degree of staple tenderness produced by this chemical reaction are seen as disadvantages. The other major disadvantage of the system relates to the use of hydrosulphide materials.

The crutching method described in this paper and the associated film attempts to adapt the felmongering technique for use on live sheep. The mister and the sheep handling device are the major adaptations which afford the system practical application in the sheep industry. The hydrosulphide concentration required to treat sheep in temperate regions may need to exceed that successfully used on our high yielding tropical Merinos.

* Toorak Research Station, Dept. Primary Industries, Julia Creek, 4823

** Animal Research Institute, Dept. Primary Industries, Brisbane, 4105