



# Improving Saline Pasture Reduces Vegetable Matter Contamination in Wool

## Aim

To enhance the productivity of salt tolerant perennial grass-based pasture systems

## Introduction

- Vegetable matter (VM) contamination is an important issue for wool and prime lamb producers in Australia.
- Sea barley grass (*Hordeum marinum*) is generally the most common grass on degraded saline land.
- Sea barley grass is known to significantly contribute to VM contamination

The impact of improving saline pasture on the amount of VM contamination of wool was studied as part of the Sustainable Grazing on Saline Lands project in the Upper South East of South Australia.

## Treatments

This experiment evaluated VM contamination in belly wool of merino sheep grazing one of five pasture and fertiliser strategies:

- Unimproved saline pasture - sea barley grass (*Hordeum marinum*) and Threlkeldia (*Threlkeldia diffusa*)
- Improved saline pasture - predominantly puccinellia (*Puccinellia ciliata*)
- Improved saline pasture with 75kg/ha Superphosphate (Improved + Sp) applied annually
- Improved saline pasture with 75kg/ha Superphosphate and 100kg/ha Urea applied annually (Improved+Sp+U)
- Improved saline pasture with balansa clover (*Trifolium michelianum*) sown and 75kg/ha Superphosphate applied annually (Improved+Sp+Bc)

## Results

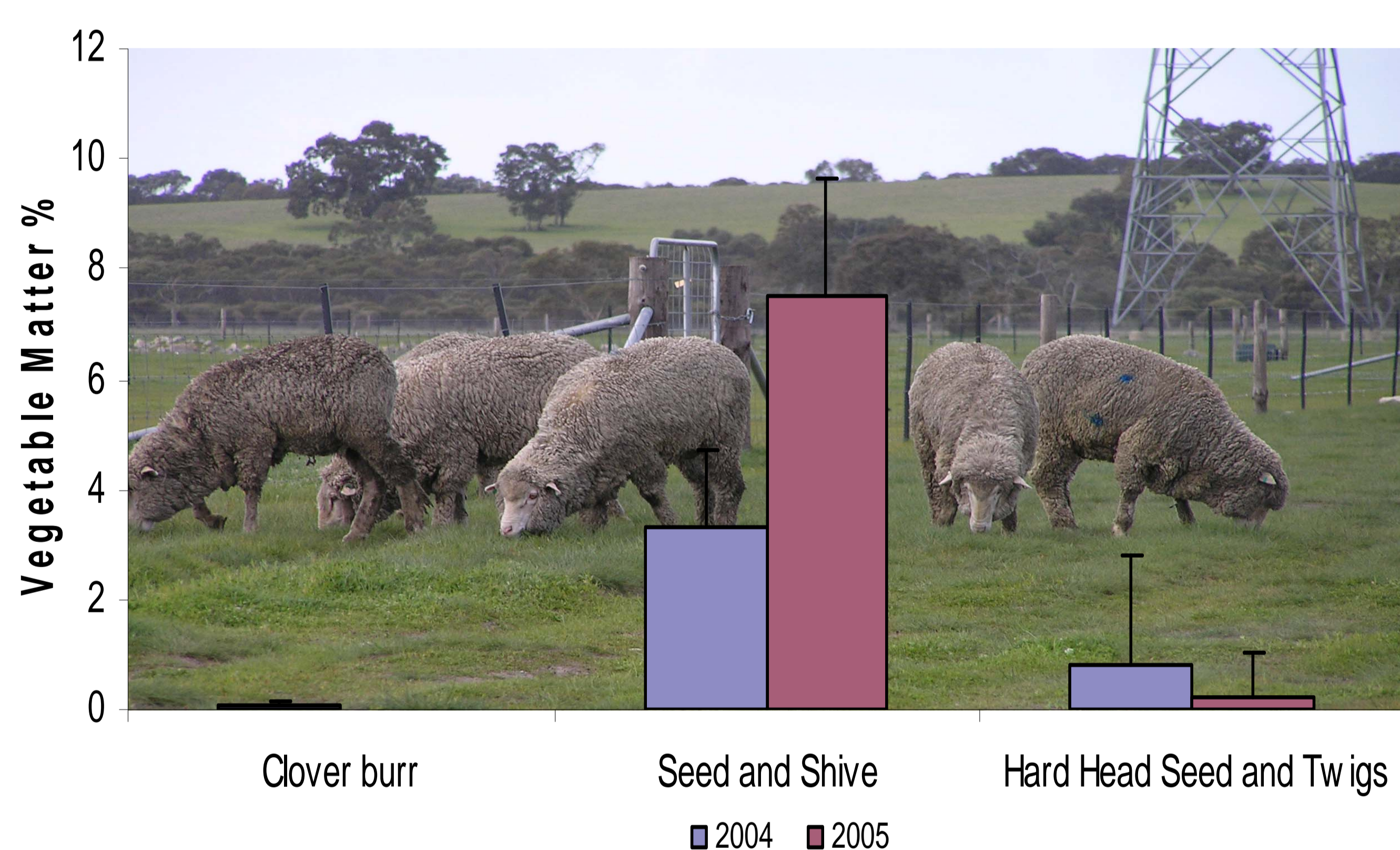


Fig 1. VM types in belly wool for 2004 and 2005.

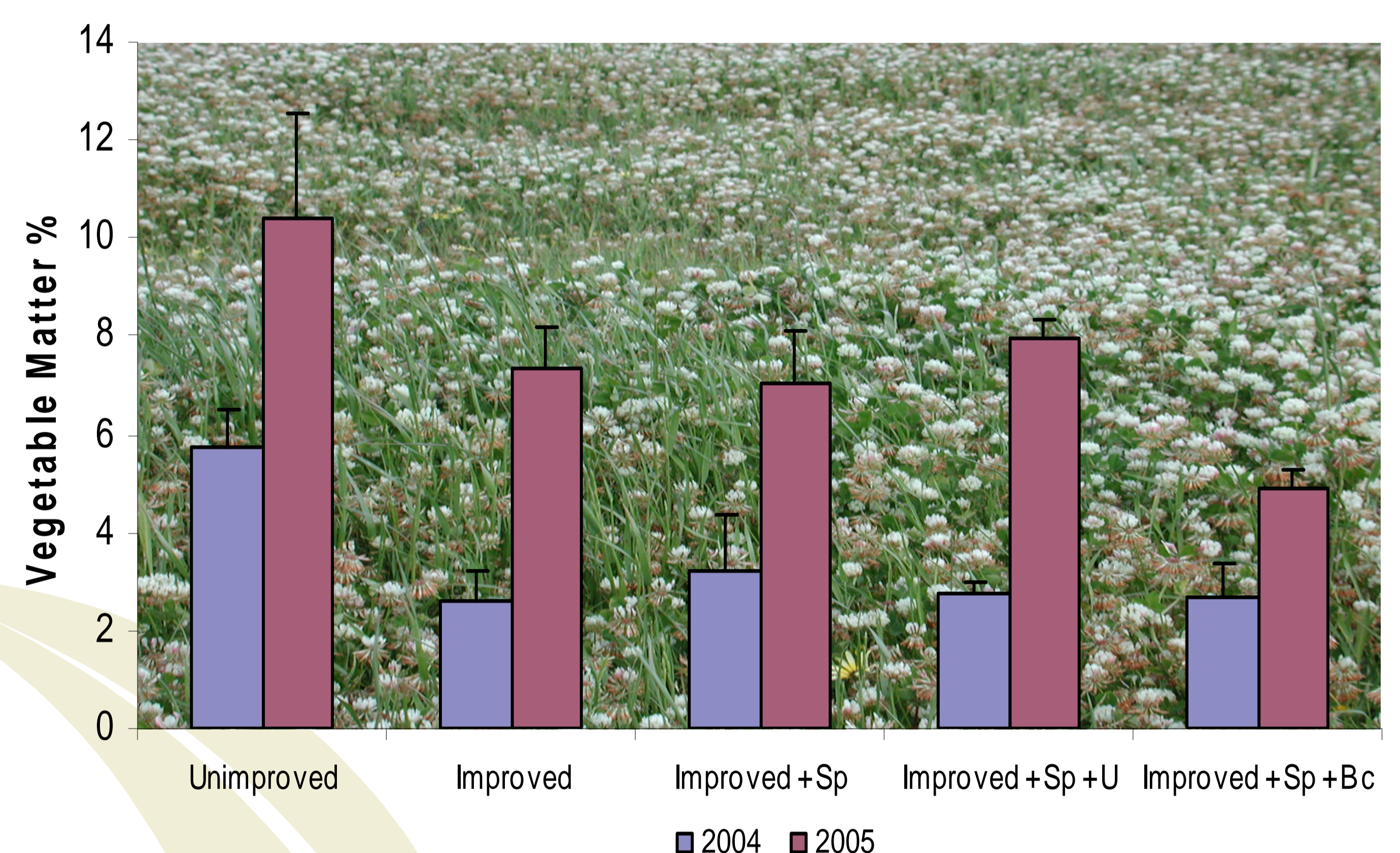


Fig 2. Total VM in belly wool for each of the treatments for 2004 and 2005.

## Conclusions

- Seed and shive comprised the greatest proportion of VM in belly wool
- A change in pasture type from unimproved to puccinellia dominant pasture significantly decreased VM contamination
- A puccinellia and balansa clover (Improved+Sp+Bc) dominated pasture resulted in the lowest VM contamination
- Reduction in wool contamination and carcass damage from VM could add to sheep and lamb profitability

