

SEMIARID GRASSLAND AND WINTER CEREALS FOR LAMB PRODUCTION IN NORTHEAST PATAGONIA (ARGENTINA).

D. P. Miñón¹, G. G. Durañona¹, J. C., García Vinent¹, Giorgetti², H. D. y Rodríguez², G.

1- EEA Valle Inferior-Convenio Prov. Río Negro-INTA. Casilla de Correo 153, Viedma. Río Negro, Argentina. E-mail: domino@inta.gov.ar

2- Chacra Experimental de Patagones (MAGyA, Buenos Aires).

Abstract

In northeastern Patagonia where grain crops often led to harvest failures, low yields and a high drought risk, a lamb production system was established. On a 10 years old agriculture plot wheat cropping was interrupted in 1996, allowing re-vegetation through exclusion of grazing. Natural grassland recovered, prevailing at present *Stipa tenuis*, *Piptochaetium napostaense*, *Stipa ambigua* and on minor proportion *Stipa clarazii* and *Poa lanuginosa*. Part of the plot was sown to wheat grass (*Thinopyrum ponticum*). In 1999, to improve sheep feeding, oat (*Avena sativa*) and barley (*Hordeum vulgare*) were sown for grazing during winter-spring season. In this system Corriedale sheep and Texel x Australian Merino (TEMA) and Ile de France x Australian Merino (ILMA) crosses were tested. Fertility, prolificacy, lamb mortality and weaning were evaluated. No differences among genotypes ($\alpha=0.05$) were found. Weaned lamb weight per ewe was significantly higher in cross ewes ($p<0,0035$), while production efficiency showed no significant differences among genotypes ($\alpha=0,05$), because of the higher body live weight of the crosses ($p<0,0001$). Yields of 16,4; 19,4 and 20,2 kg lamb hectare⁻¹ for Corriedale, TEMA and ILMA respectively were calculated; this represent an increase of 18 and 23 %. These differences could become economically significant in the production system under study.

Key words: agrosystems, grassland, wheat grass, winter oat and barley, sheep, cross breeding, Patagonia.

Introduction

Northeastern Argentine Patagonia which belongs to the Phytogeographical "Monte" Province (Cabrera, 1976), shows native vegetation in a layer with few isolated tree individuals of *Prosopis caldenia* and unrestricted shrubs layer of *Geofrea decorticans*, *Larrea divaricata*, *Chuquiraga erinacea*, *Condalia microphylla*, *Schinus fasciculatus* and *Lycium chilensis*. The lowest layer contains forbs and grasses (*Stipa tenuis*, *S. ambigua*, *S. Clarazii*, *Poa lanuginosa* and *Piptochaetium napostaense*).

An inappropriate use of native grasslands due to overgrazing and to deforestation for grain cropping, cause severe wind erosion, losses of soil and reduction of the profitable potential. This kind of agriculture is signed by very low grain yields and a high risk of drought.

