
Purpose of the trip: To attend and present a scientific poster at the 2007 Latino American Society for Animal Production (ALPA).

The meeting included plenary meetings during the mornings of October 22 (Animal Production and Genetics), October 23 (Tendencies in Animal Production and Sustainable Production) October 24 (Animal Production Technologies) and October 25 (University Education, Research and Extension). The most important topics discussed at them that may have application to the beef and dairy enterprises in Puerto Rico are:

1. The prospective use of single nucleotide polymorphism markers (already in use in Puerto Rico) combined with the production information provided by the use of farm adequate records have the potential to enhance the rates genetic improvement in dairy and beef cattle.

2. A series of studies conducted with cattle have well documented that follicular growth occurs in a wave like fashion and that the majority of estrous cycles in cattle are comprised of two or three of such waves. Predictive factors associated with two or three waves cycles may provide insight into the mechanisms controlling the pattern, and have important implications on breeding management and the development of effective protocols for ovarian synchronization. Recent ultrasound studies have revealed that the variability in super stimulatory response is primarily associated with the status of follicular wave development at the time of treatment is initiated and the number of follicles present at wave emergence within individuals. Significantly more large follicles develop and more ovulations are induced when treatment is initiated at the time of wave emergence (before selection of dominant follicle) than after.

I attended the Small Ruminant Production, The Double Purpose Cattle Production, The Camelids Production, and the Bovine Production symposiums. The most relevant concept gathered from the symposiums that may have applications to our local conditions are that the use of grazing systems under temperate zones of Latin America as in Puerto Rico are more rentable than system that rely on partial or total confinement. The poster was presented on the October 24, 2007, and was very well received by attendees.

Recommendations:

1. Maintain coordination established with other researchers working with the same problems as a means of comparing data and share the use of some technologies developed.

2. Conduct work on follicular development using dry cows and heifers and ultrasound at the Experimental Station at Gurabo to evaluate synchronization protocols and embryo production and use in comparison with normal artificial insemination.
3. Continue the economic evaluation of production and management systems to improve profitability of the milk production in Puerto Rico.

Respectfully,

José Pantoja López
Extension Dairyman