

Using Growth Promotant Implants

BC-5001 – Revised: January, 1998

Dr. Larry W. Olson - Extension Animal Scientist

There are very few things commercial cow-calf, stocker, and feedlot producers can do to generate the positive productivity and economic results of using growth prominent implants. It's also one of the easiest things for anyone to do. University research, extension on-farm demonstrations and producers across the country routinely get the following average response from using growth promotant implants:

- 10-20% increase in ADG
- 7-10% improvement in feed efficiency
- Return on investment of \$15-20 per \$1 cost
- No effect on carcass quality

The level of response to growth promotant implants is directly affected by the genetic ability of individual animals to grow. In turn, the ability to express genetic potential for growth and the level of response to any implant is limited by the available feed and forage quality and quantity, health of the animals, weather, implant site and management. If an animal is sick for a prolonged period of time, response to an implant will be low. Therefore, a good herd health program is essential for realization of the potential benefits of the growth promotant implant. Prolonged periods of inclement weather or drought limits implant response primarily by restricting feed availability and/or quality. Improper implantation of the growth promotant will greatly limit its effectiveness. Management decisions and procedures such as when bull calves are castrated and implanted directly affects the level of total response to implants. For example, bull calves castrated and implanted at birth could be re-implanted at 3 months-of-age when all calves receive their first round of vaccinations if the producer is using an implant that last 100 days.

If an ear tag is going to be placed in the same ear as the implant, the ear tag should be put in before the implant. Putting the ear tag in after the implant increases the likelihood of putting it in the same location as the implant resulting in loss of the implant. The growth promotant containing pellets must be injected subcutaneously (under the skin) with the appropriate applicator gun in the correct location on the back of the ear. Otherwise, the implant may not deliver the correct amount of the growth promoting compounds.

Care is needed to keep the applicator gun working properly and to keep the needle sharp and clean. If you drop the gun on a concrete floor needle point first, replace the dulled needle immediately. Keep the implanter gun and needle clean. The needle should be disinfected frequently to prevent the implant site from becoming infected thus inhibiting the implants ability to function and the animal's ability to respond to the growth promotant. You would also have the added expense of treating an infection with antibiotics. Proper head restraint is required for correct implantation of the growth promotant, as well as, for the safety of the person putting in the implant. Most improperly implanted growth promotants are the results of the person pulling the trigger on the applicator gun not taking the time and effort to put the implant in subcutaneously in the correct part of the ear. When properly implanted under the skin, you should be able to feel the growth promotant pellets with your fingers.

Several companies manufacture and market growth promotant implants. They all work well when properly implanted and when used at the correct time. The following table lists available growth promotant implants, their average retail cost per dose, any restrictions on their use (ex. age, weight or sex) and how long they are effective. All of the growth promotant implants currently on the market have 0 days pre-slaughter withdrawal time requirements. No withdrawal is required because they do not leave any residue anywhere in the body except at the ear implantation site.

The economics benefits of the high return on investment from using growth promotant implants cannot be overlooked by any segment of the commercial beef cattle business. Growth promotants are safe and effective. They do not leave hormone residues in the muscle, fat or organs. Meat from cattle receiving implants is absolutely as safe and no different than meat from non-implanted cattle. The only difference is implanted cattle grow faster and more efficiently and make producers in all segments of the commercial cattle business more money.

For Additional Information Contact:

Dr. Larry W. Olson
Extension Animal Scientist
Edisto Research & Education Center 64 Research Rd.
Blackville, SC 29817

Email: LOLSON@clemson.edu
Phone: 803-284-3343 ext 231
Fax: 803-284-3684

<http://www.clemson.edu/extension/livestock>