

# How to use prostaglandin in estrus synchronization

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P.O. Box 9101, Canton, Ohio 44711 **CALL TOLL FREE 800-321-0235** (For Beef & Non-Lactating Dairy cattle) UNIVERSITY PARK — Prostaglandin (Lutalyse) is á drug that has recently been approved by the Food and Drug Administration for use in beef cattle and dairy heifers.

Through the use of this drug, estrus and subsequent release of the egg from the ovary (ovulation) can be controlled or synchronized.

In the normally cycling heifer a corpus luteum develops on the ovary after the egg has been ovulated. Heifers will not express estrus or ovulate as long as they have an active CL present on the ovary.

The CL remains active until approximately day 18 of the 21-day cycle.

If prostaglandin is injected between day 5 and 18 of the cycle it will cause degeneration of the CL.

On the average, animals will come into heat about three days after the injec-

Since all animals do not have an active CL on the day of injection, a second injection 11 days following the first injection is required to synchronize all cycling animals. Such a synchronized group of heifers can be artifically inseminated at a predetermined time or as heifers express heat following treatment.

Research has indicated that higher conception rates are achieved in animals which express heat following prostaglandin treatment than those which fail to exhibit heat.

This synchronization program requires good management before it can be used successfully.

Prostaglandin treatment is not a substitute for good management. Heifers must be cycling before synchronization will work. This means heifers must be in good condition and on a good level of nutrition.

It is advisable to check all heifers by rectal palpation to determine if indeed they are cycling.

Adequate facilities should exist to insure safe and efficient handling and insemination of the heifers.

If many heifers are to be inseminated at one time, additional qualified technicians should be used. High quality semen and good semen handling techniques are required.

Prostaglandin must be administered bу veterinarian. The drug is not approved for use in lactating dairy cows and if it is injected into pregnant animals it could induce abortion.

Conception rates will

generally not be improved through the use of prostaglandin.

Estrus synchronization can be a profitable aid to good herd managers. Through controlled breeding, heifers can be bred artificially to genetically superior stres.

There is a reduction in the time for heat detection.

Finally, heifers can be bred to calve routinely at 22 to 26 months of age.

To avoid disappointment from using prostaglandin, it is essential that herd managers plan in advance and consult with their veterinarian and AI personnel.

# Sugar duty reduced to minimum level

WASHINGTON, D.C. -President Carter has reduced the import duty on raw sugar by 2.1875 cents per pound-98 degree basis raw sugar, the standard basis for sugar trading -- to the statutory minimum of 0.625 cents per pound effective last Friday.

Duties on other sugars, syrups and molasses are at comparable levels after adjusting for quality.

According to Howard Hjort, director of economics, policy analysis and budget for the U.S. Department of Agriculture, domestic spot raw sugar prices have been in excess of 19 cents per pound since January 16.

World sugar stocks are being reduced this year for

the first time in seven years. The outlook for the rest of 1980 and 1981 is for continuing strong world sugar prices, and for strong domestic prices, Hjort said.

Hjort said the domestic spot sugar price on Jan. 31 was 23.01 cents per pound. "If the full amount of the reduction in duty were passed on to consumers, the U.S. domestic price would be 20.8 cents, well above the U.S. domestic market price objective of 15.8 cents per pound raw value," he said.

This reduction implies a major savings for con-sumers of more than 2 cents per pound, raw value and more than \$400 million on an annual basis, according to Hjort.

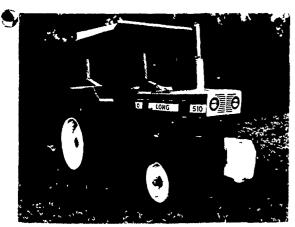
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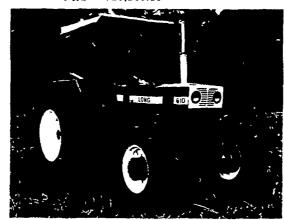
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