

Department of Agriculture PHILIPPINE CARABAO CENTER CENTER: ROUGH I ROLLOW I ROLLOW I ROLLOW I AND A CONTRACT OF A CONTRACT O

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# A SOLUTION FOR IMPROVING CARABAO'S REPRODUCTIVE EFFICIENCY

Flushing the uterus with iodine solution helps improve the reproductive efficiency of carabao. This technique facilitates faster uterine "involution" (a process whereby the uterus returns to its normal pre-pregnant state) and treats postbreeding endometritis or inflamation of the lining of uterus. Enhancing the reproductive performance of carabaos through artificial insemination (AI) is one of the challenges in breeding management to achieve 14 months of calving interval for dairy buffaloes.

A calving interval of 15-16 months is achievable with the following stages: 10.5 months of gestation period, two months of uterine involution and three months of natural breeding for impregnation.

Fourteen months of calving interval, meanwhile, is achievable through AI with two months of uterine involution and three months of natural breeding with impregnation being shortened to 45 days and 60 days, respectively.

## Solution

Uterine flushing (washing of uterus) technology shortens uterine involution process, which results in early estrus (heat period) of carabaos and breeding after calving. Early impregnation of carabaos at 42 days after calving increases AI efficiency and shortens calving interval.

The carabao uterus is flushed with povidoneiodine within 48 hours after calving to protect it from infection and postbreeding endometritis. It helps maintain good fertility and reproduction performance of carabaos.

# What are the needed materials?

- 10% Povidone-lodine Solution (iodine antiseptic available in drug stores)
- 60-mL syringe
- A.I. straw sheath

# Procedure

Within 48 hours after calving:

1. Mix 400 ml of 10 percent povidone-iodine solution with 600 ml water. This mixture will produce 4 percent solution for uterine flushing.

2. Clean the vulva or outer part of the genitals of the female carabao properly using water and soap. 3. Allocate 120 ml of four percent povidoneiodine solution for each carabao using a 60 ml syringe.

4. Get iodine solution from its container using the 60 ml syringe.

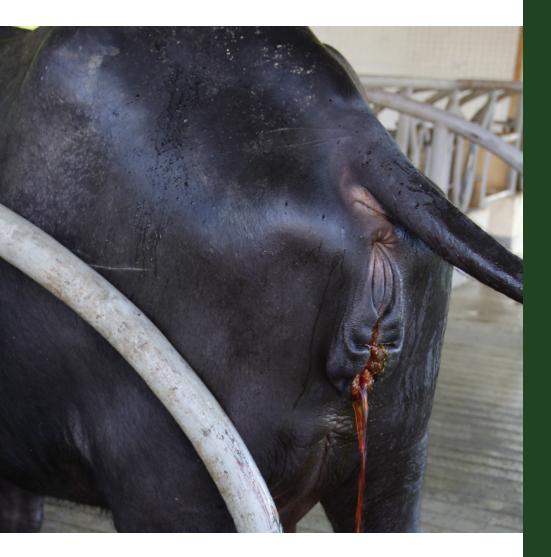
5. Insert the straw sheath directly to the uterus of the animal while being guided by rectal palpation.



6. Attach the 60 ml syringe at the end of the Al straw sheath and inject the povidone-iodine solution.

7. Remove the syringe and leave the AI straw sheath in the carabao's vagina; draw another 60 ml of four percent povidone-iodine solution into the syringe.

8. Pull out the AI straw sheath completely, clean it, and dispose of it properly.



## Lessons Learned

Uterine flushing technology:

- •cleans the uterus of the carabao
- improves and provides faster recovery of the animal's uterus
- •shortens uterine involution process and calving interval

**Keywords:** artificial insemination, reproduction performance, povidone-iodine solution

# Result

Animals treated with four percent povidoneiodine solution showed better condition especially on the delicate part of its body. Meanwhile, after just 29 days, the uterus of the animal has gone back to its normal condition while 33 days is the earliest time for the onset of estrus. This proves that the Al service, which was provided to carabao, resulted in 75 percent success rate.





For more information, please contact the following:

CARO B. SALCES GUILLERMA ABAY-ABAY ALEXANDER S. CASINILLO GUNDOLINO P. BAJENTING

Telephone No.: (+63) (38) 518 5598 Email: pccusf.ubay@yahoo.com

#### ABOUT THE MATERIAL

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#### **PRODUCTION TEAM**

Editor-in-chief: Eric P. Palacpac Writers: Caro B. Salces, Guillerma Abay-abay, Alexander S. Casinillo and Gundalino P. Bajenting Translator (from Filipino to English language): Chrissalyn L. Marcelo Layout: Rowena G. Bumanlag and Chrissalyn L. Marcelo Photos: Rowena G. Bumanlag, Chrissalyn L. Marcelo and Khrizie Evert M. Padre Editorial Consultant: Anselmo S. Roque and Maria Celeste H. Cadiz Editorial Adviser: Arnel N. Del Barrio