

## Reliability of Swine Estrous Detector Probe in Dairy Cattle Breeding

**Authors :** O. O. Leigh, L. C. Agbugba, A. O. Oyewunmi, A. E. Ibiam, A. Hassan

**Abstract :** Accuracy of insemination timing is a key determinant of high pregnancy rates in livestock breeding stations. The estrous detector probes are a recent introduction into the Nigerian livestock farming sector. Many of these probes are species-labeled and they measure changes in the vaginal mucus resistivity (VMR) during the stages of the estrous cycle. With respect to size and shaft conformation, the Draminski® swine estrous detector probe (sEDP) is quite similar to the bovine estrous detector probe. We investigated the reliability of the sEDP at insemination time on two farms designated as FM A and FM B. Cows (Bunaji, n=20 per farm) were evaluated for VMR at 16th h post standard OvSynch protocol, with concurrent insemination on FM B only. The difference in the mean VMR between FM A ( $221 \pm 24.36$ ) Ohms and FM B ( $254 \pm 35.59$ ) Ohms was not significant ( $p > 0.05$ ). Sixteen cows (80%) at FM B were later (day 70) confirmed pregnant via rectal palpation and calved at term. These findings suggest consistency in VMR evaluated with sEDP at insemination as well as a high predictability for VMR associated with good pregnancy rates in dairy cattle. We conclude that Draminski® swine estrous detector probe is reliable in determining time of insemination in cattle breeding stations.

**Keywords :** dairy cattle, insemination, swine estrous probe, vaginal mucus resistivity

**Conference Title :** ICBBS 2019 : International Conference on Breeding and Breeding Strategies

**Conference Location :** Prague, Czechia

**Conference Dates :** July 09-10, 2019