

# **EVALUASI KEBERHASILAN INSEMINASI BUATAN PADA SAPI LOKAL DAN SAPI PERSILANGAN DI KECAMATAN PRAMBANAN**

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## **INTISARI\***

Penelitian ini bertujuan untuk mengetahui dan mengkaji keberhasilan inseminasi buatan antara sapi lokal dan sapi silangan berdasarkan *Service per conception*, *Conception Rate*, *Non Return Rate*, Umur pertama beranak, jarak beranak dan konsumsi pakan. Penelitian dilaksanakan pada tanggal 1-30 Desember 2022 di Kecamatan Prambanan, Sleman, Yogyakarta. Materi penelitian meliputi peternak sapi lokal dan sapi silangan yang mempunyai pengalaman beternak lebih dari 2 tahun. Penelitian ini menggunakan metode survey dengan wawancara kepada responden. variabel penelitian meliputi profil peternak, *Service per conception*, *conception rate*, umur pertama beranak, *Non return rate*, *calving interval* dan konsumsi pakan. Analisis data menggunakan analisis regresi linier berganda. Hasil penelitian menunjukkan rata-rata umur peternak sapi lokal dan sapi hasil persilangan 56 dan 55 tahun, pendidikan peternak rata-rata SMA, rata-rata pengalaman beternak sapi lokal 23 tahun dan sapi silangan 21 tahun, jumlah kepemilikan ternak pada sapi lokal rata-rata 1 dan sapi hasil persilangan 2 ekor, sedangkan pekerjaan pokok rata-rata buruh. *Service Per Conception* sapi lokal 1,76 sedangkan pada sapi silangan 2,10 kali, *Conception rate* sapi lokal 56% sedangkan pada sapi silangan 40%, *Non Return Rate* 74% untuk sapi lokal 64% dan sapi silangan, *Calving interval* rata-rata sapi lokal dan sapi silangan 13 dan 14 bulan, Umur pertama beranak rata-rata dari sapi lokal dan sapi silangan yaitu 28 bulan, Hasil analisis regresi linear berganda sapi lokal *service per conception*, *conception rate*, *Non return rate*, *calving interval* dan konsumsi pakan menunjukkan berbeda nyata ( $P<0,05$ ), sedangkan pada umur pertama beranak tidak berbeda nyata ( $P>0,05$ ). Pada hasil analisis regresi linier sapi potong persilangan menunjukkan *service per conception*, *conception rate* dan *Non return rate*, berbeda nyata ( $P<0,05$ ), sedangkan pada umur pertama beranak, *calving interval* dan konsumsi pakan tidak berbeda nyata ( $P>0,05$ ). Dapat disimpulkan bahwa evaluasi keberhasilan inseminasi buatan antara sapi lokal dan sapi silangan lebih baik sapi lokal berdasarkan *Service Per Conception* (S/C), *Conception Rate* (C/R), *Non Return Rate* (NRR), *Calving interval*, umur pertama beranak, dan konsumsi pakan.

**Kata kunci :** Evaluasi keberhasilan, Inseminasi buatan, sapi lokal, sapi silangan, Kecamatan Prambanan

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**THE EVALUATION OF ARTIFICIAL INSEMINATION  
SUCCESSFULLY ON LOCAL CATTLE AND CROSSBREED CATTLE IN  
PRAMBANAN DISTRICT**

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**ABSTRACT\***

This study aims to identify and assess the success of artificial insemination between local and cross-breed cattle based on service per conception, conception rate, non-return rate, age at first calving, calving distance and feed consumption. The research was conducted from 1-30 December 2022 in Prambanan District, Sleman, Yogyakarta. The research materials included local and cross-breed cattle breeders who had more than 2 years of breeding experience. This study uses a survey method with interviews with respondents. Research variables include breeder profile, service per conception, conception rate, age at first calving, non-return rate, calving interval and feed consumption. Data analysis used multiple linear regression analysis. The results showed that the average age of local cattle breeders and crossbreed cattle was 56 and 55 years, the average breeder's education was high school, the average experience in raising local cattle was 23 years and 21 years for cross cattle, the average number of cattle owned by local cattle 1 and 2 crossbreed cows, while the main job is the average worker. Service Per Conception for local cattle is 1.76 while for cross cattle it is 2.10 times, Conception rate for local cattle is 56% while for cross cattle it is 40%, Non Return Rate is 74% for local cattle 64% and for cross cattle, the average calving interval for cattle local and cross cattle 13 and 14 months, the average age of first calving of local and cross breed cattle is 28 months, the results of multiple linear regression analysis of local cattle show. The results of the linear regression analysis of local beef cattle showed that service per conception, conception rate, non-return rate, calving interval and feed consumption were significantly different ( $P<0.05$ ), whereas at the age of first calving they were not significantly different ( $P>0.05$ ). The results of the linear regression analysis of cross-breed beef cattle showed that service per conception, conception rate and non-return rate were significantly different ( $P<0.05$ ), whereas at the age of first calving, calving interval and feed consumption were not significantly different ( $P>0.05$ ). It can be concluded that the evaluation of the success of artificial insemination between local cattle and cross-breed cattle is better for local cattle based on Service Per Conception (S/C), Conception Rate (C/R), Non Return Rate (NRR), Calving interval, age at first calving, and feed consumption.

**Keywords :** Evaluation of success, artificial insemination, local cattle, cross cattle, Prambanan District

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