

Keberhasilan Inseminasi Buatan Pada Sapi Potong di Wilayah Karesidenan Bojonegoro

INTISARI

Tujuan penelitian ini adalah untuk mengetahui keberhasilan inseminasi buatan di wilayah karesidenan Bojonegoro. Penelitian ini dilakukan di tiga wilayah meliputi Bojonegoro, Lamongan, dan Tuban. Pemilihan wilayah-wilayah ini telah mewakili setiap profil daerah, Bojonegoro mewakili wilayah hutan dan dataran tinggi, Lamongan sebagai wilayah pesisir, dan Tuban mewakili wilayah industri. Penelitian ini dilakukan dengan melibatkan Dinas Peternakan dan Pertanian Bojonegoro dan para inseminator. Materi yang digunakan meliputi 150 indukan sapi potong atau sapi dara yang siap kawin dan peternak sebagai responden. Inseminasi buatan dilakukan dengan semen beku yang didapatkan dari balai besar inseminasi buatan (BBIB). Inseminasi buatan dilakukan setelah petugas inseminator mendapatkan laporan adanya indikasi birahi dari peternak. Dua bulan setelah dilakukan inseminasi buatan dilakukan pemeriksaan kebuntingan (PKB). Data yang diambil meliputi: kemampuan peternak dalam deteksi birahi, data *service per conception* (S/C), dan *pregnancy rate*. Karakteristik peternak meliputi tingkat pendidikan dan umur di analisa secara deskriptif. Data S/C dan *pregnancy rate* dianalisa menggunakan *one way anova* pola searah. Hasil penelitian menunjukkan terdapat 3 bangsa sapi potong yaitu peranakan Ongole 40 ekor, peranakan Simental 36 ekor, dan peranakan Limousine 29 ekor. Umur peternak di wilayah Bojonegoro, Lamongan, dan Tuban masing masing berkisar 38-63 tahun, 26-52 tahun, 35-58 tahun. Tingkat Pendidikan peternak (sarjana) di wilayah Bojonegoro, Lamongan dan Tuban masing-masing 23,1% 40,6%, dan 44,5%. Hasil penelitian menunjukkan terdapat perbedaan yang nyata pada S/C ($p \leq 0,05$) di wilayah penelitian. Nilai S/C pada wilayah Bojonegoro, Lamongan dan Tuban adalah $1,27 \pm 0,28$, $1,48 \pm 0,66$, $1,30 \pm 0,42$. Tidak terdapat perbedaan nyata pada *pregnancy rate* di wilayah penelitian ($p \geq 0,05$). *Pregnancy rate* di wilayah Bojonegoro, Lamongan, dan Tuban masing masing sebesar $56,67 \pm 4,51\%$, $55,00 \pm 14,43\%$, $59,67 \pm 5,00\%$. Dapat disimpulkan bahwa wilayah Bojonegoro memiliki keberhasilan inseminasi buatan tertinggi ditinjau dari S/C.

Kata kunci: Kinerja Reproduksi, Inseminasi, Sapi Potong, Bojonegoro.

The Success Rate of Artificial Insemination in Beef Cattle in the Bojonegoro Residency Area

ABSTRACT

This study aimed to determine the success rate of artificial insemination in the Bojonegoro residency area. This research was conducted in three regencies: Bojonegoro, Lamongan, and Tuban. These areas were chosen to represent each region's profile; Bojonegoro as a forest and highland area, Lamongan as a coastal area, and Tuban as an industrial area. This study was carried out with the assistance of the Bojonegoro Livestock and Agriculture Service and field inseminators. The materials used include 150 mature heifers and local breeders as respondents. Artificial insemination was performed using frozen sperm obtained from the Artificial Insemination Center (BBIB) after the inseminator officer received reports of estrus indications from breeders. A pregnancy test was performed two months after the artificial insemination procedure. The data collected included breeders' ability to detect estrous signs, service per conception (S/C), and pregnancy rate. Breeders' profile which included their age and educational background, was analyzed descriptively. The S/C and pregnancy rate data were analyzed using a one-way ANOVA. This study identified three cattle breeds available in the study area, which was 40 Ongole crossbreed, 36 Simmental crossbreeds, and 29 Limousine crossbreed cattle. Breeder characteristics included the age of breeders in the Bojonegoro, Lamongan, and Tuban was ranged between 38-63 years, 26-52 years, and 35-58 years, respectively. The percentage of a breeder with an undergraduate degree was 23.1%, 40.6%, and 44.5% in Bojonegoro, Lamongan, and Tuban, respectively. The S/C rate was found significantly different in this study area, with the S/C value in the Bojonegoro, Lamongan, and Tuban, areas being 1.27 ± 0.28 , 1.48 ± 0.66 , 1.30 ± 0.42 , respectively. There was no significant difference ($p \leq 0.05$) in the pregnancy rate in the study areas ($p \geq 0.05$). There was no significant difference in the pregnancy rate in the study areas ($p \geq 0.05$), with pregnancy rates in the Bojonegoro, Lamongan, and Tuban regions were $56.67 \pm 4.51\%$, $55.00 \pm 14.43\%$, $59.67 \pm 5.00\%$, respectively. It can be concluded that the Bojonegoro region has the highest artificial insemination success in terms of S/C.

Keywords: Reproductive Performance, Insemination, Beef Cattle, Bojonegoro.