

## **ESTIMASI DINAMIKA POPULASI, PETA POPULASI DAN PENGARUH BANGSA SAPI POTONG TERHADAP KINERJA REPRODUKSI INDUK DI KECAMATAN IMOGIRI KABUPATEN BANTUL**

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### **INTISARI**

Tujuan penelitian ini adalah untuk mengetahui dinamika populasi, peta populasi, dan pengaruh bangsa terhadap kinerja reproduksi induk sapi potong di Kecamatan Imogiri Kabupaten Bantul, Penelitian pada bulan Maret 2015 sampai Juni 2015. Penelitian dengan metode survai, meliputi empat desa (Selopamiro, Karangtengah, Karangtalun, dan Imogiri), mencakup 1234 peternak sebagai responden dengan jumlah sapi 1590 ekor. Data sekunder dari Dinas Pertanian dan Kehutanan Kabupaten Bantul. Hasil penelitian diperoleh persamaan  $Y = -753,6x + 5699,4$ . Estimasi populasi sapi potong dengan metode kenaikan rata-rata di Kecamatan Imogiri pada tahun 2016 sebesar 4367 ekor dan tahun 2020 sebanyak 3211 ekor, sedangkan dengan metode *Analisis Time Series* pada tahun 2016 sebanyak 3438 ekor dan pada tahun 2020 sebanyak 424 ekor. Komposisi populasi sapi potong terdiri dari 34,53% PO, 36,60 % SIMPO, and 28,87 % LIMPO. Hasil penelitian terhadap kinerja reproduksi menunjukkan untuk induk sapi potong PO, SIMPO, dan LIMPO secara berurutan umur pertama kawin  $24,31 \pm 5,61$  bulan,  $24,58 \pm 6,57$  bulan, dan  $25,39 \pm 7,11$  bulan. Umur induk pertama beranak  $34,36 \pm 5,46$  bulan,  $34,51 \pm 5,91$  bulan, dan  $35,89 \pm 7,56$  bulan. *Post partum mating*  $8,16 \pm 3,80$  bulan,  $7,13 \pm 3,98$  bulan,  $8,22 \pm 5,08$  bulan. *Service perconception* (S/C)  $2,01 \pm 1,18$  kali,  $2,07 \pm 1,25$  kali,  $2,23 \pm 1,57$  kali. Jarak beranak  $18,32 \pm 3,80$  bulan,  $17,86 \pm 4,97$  bulan, dan  $18,26 \pm 4,41$  bulan. Berdasarkan hasil penelitian disimpulkan bangsa sapi potong berpengaruh tidak nyata terhadap kinerja reproduksi yang meliputi umur pertama kawin, umur pertama beranak, *service perconception* (S/C), dan interval kelahiran. Bangsa sapi potong PO dan LIMPO memiliki pengaruh yang tidak nyata terhadap *post partum mating*, SIMPO memiliki pengaruh yang nyata terhadap *post partum mating*.

(Kata Kunci : Sapi Potong, Populasi, Dinamika, Kinerja Induk)

**ESTIMATION OF POPULATION DYNAMICS, POPULATION MAP, AND  
THE EFFECT OF BREED ON COWS REPRODUCTIVE  
PERFORMANCE AT IMOIRI DISTRICT  
BANTUL REGENCY**

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**ABSTRACT**

The research was conducted to determine the population dynamics, population map, and effect of breed on cow performance at small holder cattle farm at Imogiri District Bantul Regency. This research was done from March 2015 to June 2015. This research was conducted using survey method in four villages (Selopamioro, Karangtengah, Karangtalun, and Imogiri), including 1234 farmers to be interviewed as respondents with the number of cattle ranchers for 1590 cattles. Secondary data from Department of Agriculture and forestry at Bantul Regency. The result showed that similarity  $Y = -753,6x + 5699,4$ . Estimation of population beef cattles with average increase method at Imogiri District in 2016 are 4367 cattle and in 2020 are 3211 cattle. If count with analysis time series method, estimation of population beef cattle in 2016 are 3438 cattle and in 2020 are 424 cattle. The compotition of beef cattle were 34,53% PO, 36,60% SIMPO, and 28,87% LIMPO. The result showed that average of beef cattle breed PO, SIMPO, and LIMPO on first mating age  $24,31 \pm 5,61$  months,  $24,58 \pm 6,57$  months, and  $25,39 \pm 7,11$  months. First partum age  $34,36 \pm 5,46$  months,  $34,51 \pm 5,91$  months, and  $35,89 \pm 7,56$  months. Post partum mating  $8,16 \pm 3,80$  months,  $7,13 \pm 3,98$  months, and  $8,22 \pm 5,08$  months. Service per conception  $2,01 \pm 1,18$ ,  $2,07 \pm 1,25$ , and  $2,23 \pm 1,57$ . Calving interval  $18,32 \pm 3,80$  months,  $17,86 \pm 4,97$  months, and  $18,26 \pm 4,41$  months. Statistic analysis showed that breed no significant differences of first mating age, first partum age, service per conception and calving interval. PO and LIMPO are no significant different on post partum mating. SIMPO is significant different on post partum mating.

(Key Words : Beef Cattle, Population, Dynamics, Cows Performance)