INTISARI

PROFIL PROGESTERON PADA SAPI PERAH YANG MENGALAMI KAWIN BERULANG

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Kawin berulang pada sapi perah merupakan salah satu gangguan reproduksi yang disebabkan oleh penurunan progesteron karena regresi korpus luteum di awal kebuntingan. Penelitian ini bertujuan untuk mengetahui profil progesteron pada sapi perah yang mengalami kawin berulang.

Penelitian ini menggunakan sampel berupa 10 ekor sapi perah yang sudah dikawinkan tiga kali atau lebih secara inseminasi buatan tetapi belum atau tidak bunting, dengan mempertimbangkan umur 3 – 5 tahun, kondisi tubuh sehat, keseragaman cara pemeliharaan dan pemberian pakan. Seluruh sapi disinkronisasi estrus dengan preparat hormon Prostaglandin ($PGF_{2\alpha}$). Pengambilan sampel darah dilakukan sebanyak 5 kali yaitu hari ke 1, 6, 10, 16 dan 20 pada siklus estrus. Hari ke 1 merupakan 4 hari setelah injeksi Prostaglandin ($PGF_{2\alpha}$) yang ke 2. Sampel darah kemudian di sentrifugasi dengan kecepatan 3000 rpm selama 15 menit untuk mendapatkan serum darah. Selanjutnya dilakukan pengujian kadar hormon progesteron menggunakan ELISA dengan kit progesteron ELISA. Data kemudian di analisis secara deskriptif dan diolah menggunakan *software Microsoft Excel*.

Hasil penelitian menunjukkan rata-rata kadar hormon progesteron pada hari ke 1 yaitu 1,89±1,71 ng/ml; hari ke 6 yaitu 8,75±3,44 ng/ml; hari ke 10 yaitu 23,98±7,34 ng/ml; hari ke 16 yaitu 21,19±7,55 ng/ml dan pada hari ke 20 yaitu 0,94±0,77 ng/ml. Hal ini menunjukkan bahwa ada peningkatan kadar progesteron sesuai siklus estrus. Selanjutnya dapat disimpulkan bahwa profil progesteron pada sapi perah yang mengalami kawin berulang secara fungsional mengikuti dinamika perkembangan dan regresi korpus luteum tetapi kuantitas lebih tinggi dibandingkan sapi perah normal.

Kata kunci: kawin berulang, progesteron, siklus estrus, sapi perah

ABSTRACT

PROGESTERONE PROFILE OF DAIRY COW THAT HAVING EXPERIENCE REPEAT BREEDING

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Repeat breeding was one of reproductive annoyed in dairy cow which caused by decrease of progesterone might be cause regretioned of corpus luteum in the beginning of pregnant. This research purposed to get to know the progesterone profile of dairy cow that having experience repeat breeding.

This research were used 10 dairy cows with body condition score 2 – 3 copulated for more than three times by artificial insemination by considering 3 – 5 of age, the uniformity of rearing method and feeding. All of cows were synchronized the estrus with hormone Prostaglandin ($PGF_{2\alpha}$). Blood sampling was done 5 times, it was the first, the sixth, the tenth, the sixteenth and the twentieth day at the estrus cycle. The first day was beginning fourth day after the second of injection hormone Prostaglandin ($PGF_{2\alpha}$). The blood sample was being sentrifugation previously by speed of 3000 rpm for 15 minutes to get the blood serum. For the next step we did the testing for the serum we got to get to know the quality of progesterone hormone using ELISA by ELISA progesterone kit. And than we analyzed the data by descriptive and was processed using the *Microsoft Excel* software.

The result of the research showed the average of the progesterone quality at the first day was 1,89±1,71 ng/ml; the sixth day was 8,75±3,44 ng/ml; the tenth day was 23,98±7,34 ng/ml; the sixteenth day was 21,19±7,55 ng/ml; and the twentieth day was 0,94±0,77 ng/ml. This matter showed that there was improvement the quality of progesterone based on the estrus cycle. Furthermore we could conclude profile of progesterone of the dairy cow that having experience repeat breeding in functional followed the dynamics development and corpus luteum regression but the quantity more than high of the normal dairy cow.

Keywords: repeat breeding, progesterone, estrus cycle, dairy cow.