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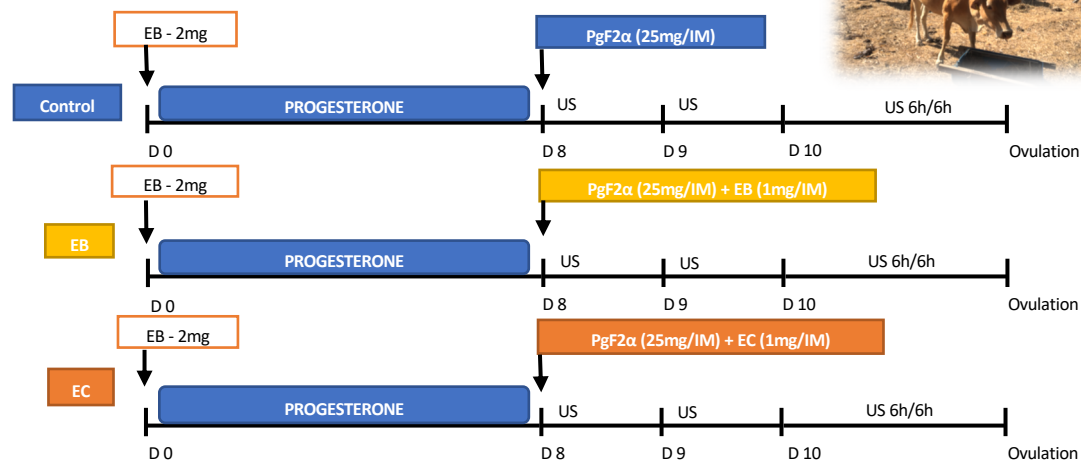
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The Pantaneiro breed cattle descend from eleven European taurine cattle breeds. Over three centuries, these animals were able to develop high adaptability and rusticity, as well as, to maintain good reproductive rates, even in the harsh conditions of the Pantanal biome. However, in detriment to the introduction of the Zebuine cattle, the Pantaneiro breed is critically endangered. The present study aimed to evaluate the potential of two estradiol esters, estradiol benzoate and estradiol cypionate, for ovulation synchronization in Pantaneiro cows.

MATERIAL AND METHODS

Pantaneiro breed cows (n=11) – 3 Groups
Crossover design



RESULTS

Regardless of the group, 73.3% (22/30) of the animals showed synchronization of the follicular emergence, which resulted in 81.81% of ovulations. For the EB and EC treatments, the ovulation rate was 81.71% (6/7) and 88.88% (8/9), respectively. For all treatments, the average size of the dominant follicle (DF) on D8 was 9.72 mm. Similar findings were noticed for pre-ovulatory follicle size for EB (10.7 ± 0.64), and EC (11.98 ± 0.95) treatments. Lastly, the interval for ovulation was 7.4 hours shorter for the EB group compared to the EC treatment.

CONCLUSION

The base protocol led to synchrony of follicular emergence and treatments with EB and EC were efficient in inducing ovulation in Pantaneiro cows.

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Figure 1 – Experimental design. Protocol treatments of the Control, and estradiol benzoate (EB) and estradiol cypionate (EC) groups. Ultrasound imaging (US) was performed from days 8 (D8) to 10 (D10) once daily, and every 6 hours from D10 to ovulation.