

## PRACTICAL EVALUATION PREGNANCY OF HEIFERS BY PUNYAKOTI TEST

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**Abstract.** In this study, the seeds germination inhibition technique was applied to diagnose pregnancy of Lithuanian Black and White dairy heifers. The urine samples collected from 14 heifers. The urine was diluted at the ratio of 1:4 with distilled water. In each sterile Petri dish, fifteen wheat seeds were taken on the blotting paper and 15 ml of diluted urine was added. Control test was also carried out with the addition of distilled water only to the wheat seeds. It was collected the urine samples on days 14, 24, 34 and 44 post embryo transplantation. Pregnancy diagnosis confirm with ultrasound device „Draminski animal profi 2” at 44 days after embryo transplantation. The germination rate was 15.0, 26.67, 19.27 and 9.27 per cent in pregnant heifers on days 14, 24, 34 and 44 post embryo transplantation. The shoot lengths of the germinated wheat seeds was 1.0, 0.4, 0.4, 0.5 cm in pregnant heifers on days 14, 24, 34 and 44 post embryo transplantation. Inhibition of germination and shoot growth were attained by the urine of pregnant heifers and does. In conclusion, seed germination test can be used as a simple and non-invasive method to detect pregnancy in heifers.

**Keywords:** Seed germination, Heifers, Shoot length, Pregnancy