

Name of the Technology: Semen collection and cryopreservation in Indigenous horses

Technology detail

- The population of indigenous equines is drastically declining at a rapid pace due to advancements in the mechanisation and hence necessary steps has to be taken to conserve this elite indigenous equine germplasm. In this endeavour, EPC, NRCE scientists have made efforts in standardizing the methodology of collection of the semen from the stallions, formulated various combinations of chemicals for successful cryopreservation of semen techniques.
- These technologies are now made ready for demonstration and distribution of these package of practices to the Agri-entrepreneurs, stakeholders, equine owners and breeders.
- The collected semen was processed through various washing steps and after adding the primary and secondary extender it is subjected for cryopreservation. Cryopreservation of semen is a technique where sperm cells being preserved are exposed to sub-zero temperature such as -196°C .
- This technique is based on principle to minimize biological activities of sperm cells to its least and thus production of negligible amount of waste products; by gradual cooling to sub-zero temperature.
- To improve stallion sperm freezability and fertility Di-methyl Formamide (DMF) based semen extender developed gave better protection to the plasma membrane and retained the acrosome and DNA integrity of the spermatozoa.

Licensing terms

- Nature of License: Non-exclusive
- Duration of the License: 05 years
- License fee:
 - Territory of India: ₹ 0.50 lakh + applicable taxes with 10% royalty on net-invoice value + applicable taxes
- Training support: Up to 3 Persons nominated by the licensee shall be trained for the period up to 5 days. The cost of training to be imparted by the institute is included in the licensing fee. The expenses for boarding and lodging and travel of the licensee personnel shall be borne by the licensee.

- All statutory compliances related to production, sales, transportation, storage and performance of the product in the field to be fulfilled by the licensee.
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