

## The effect of Eggplant peel extract addition (*Solanum melongena*) on Farahani ram sperm after oxidative stress (freeze-thawing)

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### Abstract

The aim of this study was to evaluate the effect of Eggplant peel extract on post-thawed ram sperm quality in a Tris-based extender. Semen was collected by artificial insemination vagina. Samples were pooled to prevent individual effects. Then ram semen samples were obtained, extended with Tris-based extender and supplemented with 0%, 2%, 4%, 6%, and 8% Eggplant peel extract. Later, samples were frozen by liquid nitrogen in the straw (0.25 ml). After thawing, sperm motility, viability (Nigrosine–eosin staining), membrane integrity with Hypo osmotic (Host) and morphology abnormality (Hancock test) were evaluated. Results showed that the value of 2% (62.4) of the Eggplant extract peel had a significant effect on sperm motility and membrane integrity after thawing. Also, the 2% and 4% of Eggplant peel extract groups had the most significant motility as compared to the control group and, the least motility was regarded as the most concentration of 8% of the Eggplant peel extract as compared to the control group. Thus, adding 2% and 4% of the Eggplant peel extract to Tris-based extender preserved Farahani ram sperm after thawing.

**Keywords:** Eggplant peel, extract, Semen

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