EFFECT OF TOMATO PASTE (*Solanum lycopersicum*) TO THE NUMBER OF SPERMATOOGONIUM CELLS IN TESTIS OF MICE (*Mus musculus*) EXPOSED TO BORAX

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ABSTRACT

This research was aimed to evaluate the preventive effect of tomato paste with different doses to the number of spermatogonium cells in testis of mice that exposed to borax. This research has been done on September, 1st 2015 until November, 11th 2015 at Department of Veterinary Pathology, Faculty of Veterinary Medicine, Airlangga University. Twenty four male mice (*Mus musculus*) 60-90 days old with body weight 25 g were used. These animals were divided into six groups (P0, P1, P2, P3, P4, and P5). P0 was treated with sterile aquadest 0,5 ml/mice/day, P1 was treated with borax 9,5 mg/mice/day, P2 was treated with tomato paste 0,3 g/mice/day, P3 was treated with tomato paste 0,15 g/mice/day and borax 9,5 mg/mice/day, P4 was treated with tomato paste 0,3 g/mice/day and borax 9,5 mg/mice/day, and P5 was treated with tomato paste 0,45 g/mice/day and borax 9,5 mg/mice/day. This research has been conducted for 14 days. The data were compared using ANOVA and Duncan test. Statistical comparisons were performed using SPSS 22.0 for windows. The result showed that tomato paste 0,3 g/mice/day can prevent the damage of spermatogonium cells in testis that exposed to borax significantly (p<0,01).

Key words: tomato paste, borax, spermatogonium cells.