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SURVIVAL OF BOAR SPERMATOZOA INTENDED FOR *IN VITRO* FERTILIZATION (IVF) FOLLOWING DIFFERENT SPEED, DURATION AND FREQUENCY OF SPERM WASHING

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ABSTRACT

A 3 x 2 x 2 factorial experiment in completely randomized design (CRD) was conducted to determine the effects of various washing treatments on the survival of boar sperms intended for IVF. Fresh boar spermatozoa survived various speeds (2000, 1500, or 1000 rpm), duration (10 or 5 min) and frequency (once or twice) of washing with modified Bracket and Oliphant (BO) solution. There are no interaction effects (P>.05) among factors and the main effects are likewise not significant (P > .05). Average initial sperm motility was 78.33% whereas post treatment motility varied from 66.67 to 75.00% at 0 hr, 58.33 to 71.67% at 1 hr; and 53.33 to 70.00% at 2 hr. Mean viability index ranged from 62.67 to 76.00. Indication of incomplete removal of the seminal plasma was evident in treatments with single washing.

INTRODUCTION

The production of mammalian embryos *in vitro* has been a major focus of animal biotechnology work for nearly two decades now. This is because of the expected enormous benefits that could be derived from this technique viz: production of more animals, induction of twinning or the possibility of embryo micromanipulation so as to produce animals with the desired sex, high milk yield, faster growth rate, or high immunity/tolerance to infection. The present work on IVF is really very interesting because of the possiblity of growing and cultivating immature oocytes in suitable laboratory culture conditions. We have very cheap sources of immature oocytes that could be utilized for IVF studies, i.e. from ovaries of slaughtered animals in the abbatoirs. Embryos produced can later be transferred to surrogate mothers or preserved cryogenically for future use.