Pengaruh pemberian berbagai konsentrasi konsentrat kurma (phoenix dactylifera l.) terhadap kualitas spermatozoa ikan koi (cyprinus carpio, linnaeus 1758) 48 jam pascakriopreservasi = Effects of various concentration of dates palm juice (phoenix dactylifera l.) to spermatozoa quality of koi fish (cyprinus carpio linnaeus 1758) 48 hours post cryopreservation

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Abstrak

Penelitian mengenai pengaruh pemberian berbagai konsentrasi konsentrat kurma Phoenix dactylifera L. terhadap kualitas spermatozoa ikan koi Cyprinus carpio, Linnaeus 1759 48 jam pascakriopreservasi telah dilakukan. Penelitian tujuan untuk mengetahui pengaruh pemberian kombinasi metanol 10 dengan berbagai konsentrasi konsentrat kurma 0, 3, 5, 7, dan 9 terhadap motilitas, viabilitas, dan abnormalitas spermatozoa ikan koi 48 jam pascakriopreservasi. Semen ikan koi yang digunakan untuk kriopreservasi dikoleksi dengan metode pengurutan stripping yang kemudian dievaluasi secara makroskopis dan mikroskopis.
Hasil evaluasi selanjutnya diuji dengan uji normalitas Shapiro-Wilk, uji homogenitas Levene, uji analisis variansi ANAVA faktor tunggal, dan uji perbandingan berganda Tukey. Hasil uji ANAVA faktor tunggal menunjukkan perbedaan nyata P < 0,05 terhadap persentase motilitas, viabilitas, dan abnormalitas spermatozoa ikan koi pascakriopreservasi. Metanol 10 dengan konsentrat kurma 5 merupakan kombinasi krioprotektan optimum karena menghasilkan nilai rata-rata tertinggi pada persentase motilitas 61,74 4,47 dan viabilitas 72,60 2,96, serta memberikan nilai rata-rata terendah pada persentase abnormalitas 22,00 3,16 spermatozoa ikan koi 48 jam pascakriopreservasi.
<hr>Effects of various concentrations of dates palm juice Phoenix dactylifera L. to spermatozoa quality of koi fish Cyprinus carpio, Linnaeus 1758 48 hours post cryopreservation was investigated. The aim of this research is to determine combination effects of 10 methanol and various concentration of dates palm juice 0, 3, 5, 7, and 9 to koi fish spermatozoas motility, viability, and abnormality 48 hours post cryopreservation. Semen for cryopreservation was collected by stripping, then evaluated by macroscopic and microscopic. The results of the evaluation were tested by Shapiro Wilk normality test, Levene homogeneity test, variants analysis ANAVA single factor test, and Tukey multiple comparison test. According to ANAVA, the percentage of motility, viability, and abnormality post cryopreservation was significantly different P 0,05. 10 methanol and 5 dates palm juice was the optimum concentration of cryoprotectant because it provides the highest average value in motility percentage 61,74 4,47 and viability percentage 72,60 2,96, and provides the lowest average value in abnormality percentage 22,00 3,16 spermatozoa of koi fish 48 hours post cryopreservation.