

Pengaruh penambahan sari kurma dalam ekstender fish ringer pada preservasi sperma ikan Nilem (*Osteochilus vittatus Valenciennes 1842*) terhadap persentase fertilisasi dan persentase penetasan telur = Effect of date palm juice in fish ringer on sperm preservation of nilem fish (*Osteochilus vittatus Valenciennes 1842*) on percentage of fertilization and hatching rate

Chalda Nabila, author

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Abstrak

Ikan nilem (*Osteochilus vittatus Valenciennes 1842*) merupakan ikan air tawar yang berdistribusi di perairan Asia Tenggara khususnya Indonesia. Permintaan konsumsi ikan nilem yang meningkat dan eksploitasi yang berlebihan mengakibatkan berkurangnya populasi ikan nilem. Permasalahan ini dapat diatasi dengan pelestarian ikan nilem menggunakan metode preservasi spermatozoa. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian berbagai konsentrasi sari kurma terhadap persentase fertilisasi dan penetasan telur ikan nilem 24 jam pascapreservasi pada suhu 4 – 5°C. Penelitian ini menggunakan rancangan acak lengkap (RAL) dengan lima perlakuan dan lima pengulangan. Lima perlakuan terdiri atas sari kurma 0% + fish Ringer (SK 0%), sari kurma 0,5% + fish Ringer (SK 0,5%), sari kurma 1% + fish Ringer (SK 1%), sari kurma 1,5% + fish Ringer (SK 1,5%), dan sari kurma 2% + fish Ringer (SK 2%). Data penelitian yang diperoleh diuji menggunakan uji Analisis Variansi (ANOVA) satu faktor. Hasil penelitian menunjukkan adanya perbedaan nyata ($P < 0,05$) pada nilai rata-rata persentase penetasan telur dan tidak ada perbedaan nyata ($P > 0,05$) pada nilai rata-rata persentase fertilisasi. Walaupun tidak ada perbedaan nyata, namun terdapat kecenderungan yang menunjukkan bahwa penambahan sari kurma 1% memberikan pengaruh yang efisien terhadap fertilisasi ikan nilem dibandingkan dengan perlakuan kontrol (SK 0%). Hasil penelitian menunjukkan bahwa persentase fertilisasi dan penetasan telur tertinggi terdapat pada penambahan konsentrasi 1% sari kurma dalam ekstender fish Ringer. Persentase fertilisasi spermatozoa ikan nilem 24 jam pascapreservasi menggunakan 1% sari kurma sebesar $98,57 \pm 1,80\%$ dan persentase penetasan telur sebesar $96,87 \pm 1,23\%$.

.....Nilem fish (*Osteochilus vittatus Valenciennes 1842*) is a freshwater fish distributed in the water of Southeast Asia, especially Indonesia. Increased demand for nilem fish consumption and excessive exploitation resulted in a decrease in nilem fish populations. This problem can be solved by preserving nilem fish using spermatozoa preservation method. This study aims to determine the effect of giving various concentrations of date palm juice to the percentage of fertilization and hatching rate 24 hours post preservation at a temperature of 4 - 5°C. This study used a complete randomized design (RAL) with five treatments and five repetitions. Five treatments consist of date palm juice 0% + fish Ringer (SK 0%), date juice 0.5% + fish Ringer (SK 0.5%), date juice 1% + fish Ringer (SK 1%), date juice 1.5% + fish Ringer (SK 1.5%), and date juice 2% + fish Ringer (SK 2%). The research data obtained was tested using a single-factor Variance Analysis (ANOVA) test. The results showed a significant difference ($P < 0.05$) in the average percentage of hatching rates and no significant difference ($P > 0.05$) in the average value of the percentage of fertilization. Although there is no real difference, there is a tendency that the addition of 1% date juice has an influence on the fertilization of nilem fish compared to the control treatment (SK 0%). The

results showed that the highest percentage of fertilization and hatching rates were found in the addition 1% of date palm juice in fish Ringer extenders. The highest percentage of spermatozoa fertilization of Nile fish 24 hours post-preserve using 1% date palm juice is $98.57 \pm 1.80\%$ and the percentage of hatching rates is $96.87 \pm 1.23\%$.