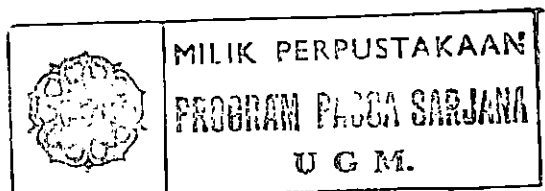


**EFEKTIVITAS AMOXYCILLIN TERHADAP  
*Streptococcus sp.* YANG DITULARKAN PADA  
IKAN KARPER (*Cyprinus carpio L*)**

**INTISARI**

Penelitian ini dilakukan untuk menentukan efektivitas *amoxycillin* terhadap *Streptococcus sp.* yang ditularkan pada ikan karper (*Cyprinus carpio L*) dan dilaksanakan di Laboratorium Basah Stasiun Karantina Ikan Selaparang, Mataram. Uji pendahuluan dilakukan untuk mengetahui sensitivitas beberapa jenis antibiotika antara lain : *amoxycillin*, *cyprofloxacin*, *contrimoxazole* dan *doxycycline*. Hasil uji *in vitro* menunjukkan, bahwa nilai *minimum inhibitory concentration* (MIC) terendah pada *amoxycillin* adalah 10 ppm, dengan nilai *minimum bactericidal concentration* (MBC) 15 ppm. Berdasarkan uji MBC, maka *amoxycillin* digunakan sebagai obat uji dengan dosis 15 ppm. Untuk mendapatkan dosis infeksi *Streptococcus sp.* terhadap ikan karper, maka dilakukan Uji LC - 50. Berdasarkan hasil uji tersebut, maka diperoleh konsentrasi bakteri  $4,6612 \times 10^{14}$  cel/ml sebagai dosis infeksi. Uji utama dilakukan dengan 8 perlakuan yang dibagi dalam 2 grup, yaitu uji pengobatan dan pencegahan. Pada masing-masing uji dilakukan dengan 5 perlakuan termasuk kontrol dengan 3 kali ulangan dan digunakan aquarium yang diisi dengan 15 ekor ikan karper dengan volume air 30 liter. Dosis *amoxycillin* yang digunakan sebagai perlakuan dalam uji pengobatan dan pencegahan adalah 15, 30, 45 dan 60 ppm. Gejala klinis dan lesi patologis yang tampak selama pengamatan dalam uji pengobatan dan pencegahan adalah antara lain : warna kulit kusam atau pucat, gerakan renang lambat, tulang bekok, operkulum terbuka ataupun terlipat, perut mengembung dan mata menonjol. Setelah dilakukan pengobatan dan pencegahan, ternyata tingkat kelangsungan hidup ikan karper meningkat 24,45% dibandingkan dengan kontrol. Hasil perhitungan statistik analisa sidik ragam ternyata tidak menunjukkan beda nyata antara masing - masing perlakuan. Hasil pengamatan ikan karper yang masih mengalami sakit selama penelitian pada dosis pengobatan menunjukkan perbedaan yang nyata. Pada kontrol masih mengalami sakit 100% dan D (60 ppm) 0%. Perhitungan statistik analisa sidik ragam dan uji jarak berganda Duncan, perlakuan akuarium A berbeda nyata dengan perlakuan akuarium B, C dan D, sedangkan antara perlakuan akuarium B, C dan D tidak berbeda nyata. Demikian juga antara masing-masing perlakuan pada uji utama dosis pencegahan, ternyata tidak memberikan hasil nyata. Berdasarkan hasil penelitian disimpulkan, bahwa dosis 30 ppm memberikan hasil yang cukup efektif untuk pengobatan ikan karper yang terinfeksi *Streptococcus sp.*

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## EFFECTIVENESS OF AMOXYCILLIN AGAINST THE *Streptococcus sp.* INFECTED TO KARPER FISH (*Cyprinus Carpio L*)

### ABSTRACT

This research was done to determine the effectiveness of amoxycillin against *the streptococcus sp.* infected to karper fish (*Cyprinus carpio L*) which was held at Wet Laboratorium Fish Quarantine Station Selaparang Mataram. Pre-test was done to know the sensitiveness of several kinds of antibiotics, such as : *amoxycillin, cyprofloxacin, contrimoxazole and doxycycline.* The result of *in vitro* test showed that the value of *minimum inhibitory concentration (MIC)*, the lowest at *amoxycillin* (10 ppm), with the value of *minimum bactericidal concentration (MBC)* is 15 ppm. Based on MBC test, *amoxycillin* was used as test medicine with dosage 15 ppm. For getting infection dosage of *Streptococcus sp.* against karper fish, the LC-50 test was applied. Based on this test, it was found that the bacterial concentration of  $4,6612 \times 10^{14}$  cell/ml was as infectious dosage. Superior test was done with 8 phases which were divided into 2 groups, i.e. the cure and prevention tests. Each test was done with 5 phases including control with 3 repeating times. Each phase was used with aquarium which was put 15 karper fish with 30 l water volume. *Amoxycillin* dosage used in the cure and prevention tests was 15, 30, 45 and 60 ppm. The clinical signs and pathological lesions seen during the present study were dark/pale skin color, very slow swimming, lordosis and scoliosis, opened/folding operculum, big belly and exophthalmic eyes. After doing the cure and prevention tests, as a matter of fact the degree of survival was raised 24,45 % compared to the control. According to the result of statistical analysis, there is no any significant differences between each phase. The result of inspection towards karper fish which was still sick during the research on cure dosage showed the significant differences. At the control, the karper fish was still sick 100 % and D (60 ppm) 0%. The calculation of analyze of kind investigation and test double distance of Duncan, phase aquarium A showed the real difference with phase aquarium B, C and D, but between phase aquarium B, C and D has no significant differences. There is also no significant differences between each phase at superior test of prevention dosage. Based on the result of research it is included that amoxycillin 30 ppm gave effective results for curing karper fish which was infected with *Streptococcus sp.*



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**Efektivitas antibiotika Amoxycillin terhadap Streptococcus sp. yang ditularkan pada ikan karper  
(Cyprinus carpio L)**

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