

## **Antibacterial Activity Test on Horse Milk from Bima Regency, West Nusa Tenggara Against Bacteria Agar Diffusion Test**

**Rachmat Kosman<sup>1,a,\*</sup>, Ayyub Harly Nurung<sup>2,a</sup>, Qasim Zainuddin<sup>3,a</sup>**

<sup>a</sup>Fakulty of Pharmacy Universitas Muslim Indonesia Makassar, Indonesia

\*[rachmatkosman@umi.ac.id](mailto:rachmatkosman@umi.ac.id)

**Abstract.** This research aimed to determine the antibacterial activity of Sumbawa horse milk samples by agar diffusion methode. The screening result of antibacterial activity of Sumbawa horse milk samples at the concentrations of 0.8% possess the activity against the bacteria *Bacillus subtilis*, *Vibrio cholerae*, *Staphylococcus aureus*, and *Escherchia coli*. The test of minimum inhibitory concentration used the concentration of 0.4%, 0.8%, 1.6%, 3.2% and 6.4% against the bacteria *Bacillus subtilis*, *Vibrio cholerae*, *Staphylococcus aureus*, and *Escherchia coli* obtained the minimum inhibitory concentration value of the 0.8%. The test result of the minimum kill concentration against the bacteria *Bacillus subtilis*, *Vibrio cholerae*, *Staphylococcus aureus*, and *Escherchia coli* obtained the value 1.6% on the bacteria *Escherchia coli* and *Staphylococcus aureus* and 3.2% on the bacteria *Bacillus subtilis* and *Vibrio cholerae*. The test result of antibacterial activity of Sumbawa horse milk samples at the concentration of 0.8%, 1.6%, 3.2% 6.4% and 12.8% were able to inhibit the growth of the test bacteria with the greatest inhibitory zone diameter at the concentration of 1.8% amounting to 14.65 mm againts the bacteria *Escherchia coli*.

**Keyword:** horse milk, agar diffusion, antibacterial