

<b>Research Title</b>	Evaluation of anti-acne inducing bacteria and gel formulation development from <i>Terminalia chebula</i> extract
<b>Researcher</b>	Piyanuch Prompamorn, PhD Naphatsorn Ratcharin, MSc
<b>Research Consultants</b>	Asst.Prof. Tasanee Panichakul, PhD
<b>Organization</b>	Program of Cosmetic Science Faculty of Science and Technology Suan Dusit Rajabhat University
<b>Year</b>	2015

The objective of this study was to prepare the crude ethanol extract of *Terminalia chebula* Retz. and to evaluate an antibacterial activity of *T. chebula* extract against anti-acne inducing bacteria including *Staphylococcus aureus* and *Staphylococcus epidermidis*. An antibacterial activity were tested by agar well diffusion method while minimum inhibitory concentration required inhibit the growth of 50% of organism (MIC<sub>50</sub>) and minimum bactericidal concentration (MBC) were tested by broth macrodilution method. The yield of the crude extract was 14.124% of the dry weight of *T. chebula* fruit. The result indicated that *T. chebula* extract can inhibit the growth of both *S. aureus* and *S. epidermidis*. The MIC<sub>50</sub> of *S. aureus* and *S. epidermidis* were 0.96 and 0.45 mg/ml, respectively. while MBC were 2.05 and 0.78 mg/ml, respectively. Gel composed of *T. chebular* were prepared and it's physiochemical properties were evaluated. The physical properties of gel were clear light yellow color with pH 6.5 and show good appearance.