Antibacterial fabrics are important not only in medical applications but also in terms of daily life usage to avoid cross infection by pathogenic microorganisms. Some pulp plants which gave high color strength and fastness values in our previous study were applied on woolen fabric to investigate efficiency against common human pathogen, St aureus. It concluded that antimicrobial properties were closely related to the dye structure and its resistance ability to rods used. The results indicate that extract of Rosmarinus officinalis was applied on woolen fabric to produce colored clothing's and textiles with semi durable antimicrobial properties and ecofriendly product in terms of no metal ion in wastewater and substrate, not water purification in accordance with regulations and no side effect on human health.