

A novel enzyme extracted from *Aloe vera* plant used in hide unhairng leather process

Abstract: The present study was aimed to isolate and purify a novel enzyme from *Aloe vera* plant. The enzyme was purified by ion exchange chromatography and size exclusion chromatography. The purified enzyme was characterized by SDS-PAGE, Western blotting, and mass spectrometry. The enzyme was found to be a novel protein with a molecular weight of approximately 45 kDa. The enzyme was active in the pH range of 4.0 to 10.0 and was stable at 40°C for 24 hours. The enzyme was used for the dehairing of goat skin. The results showed that the enzyme was highly effective in removing hair from the skin. The enzyme was found to be a novel protein with a molecular weight of approximately 45 kDa. The enzyme was active in the pH range of 4.0 to 10.0 and was stable at 40°C for 24 hours. The enzyme was used for the dehairing of goat skin. The results showed that the enzyme was highly effective in removing hair from the skin.