

## Online resource 4

### Article title:

Isolation and characterization of highly active keratinolytic microorganisms with promising potential for waste sheep wool processing

### Journal name:

Journal of Material Cycles and Waste Management

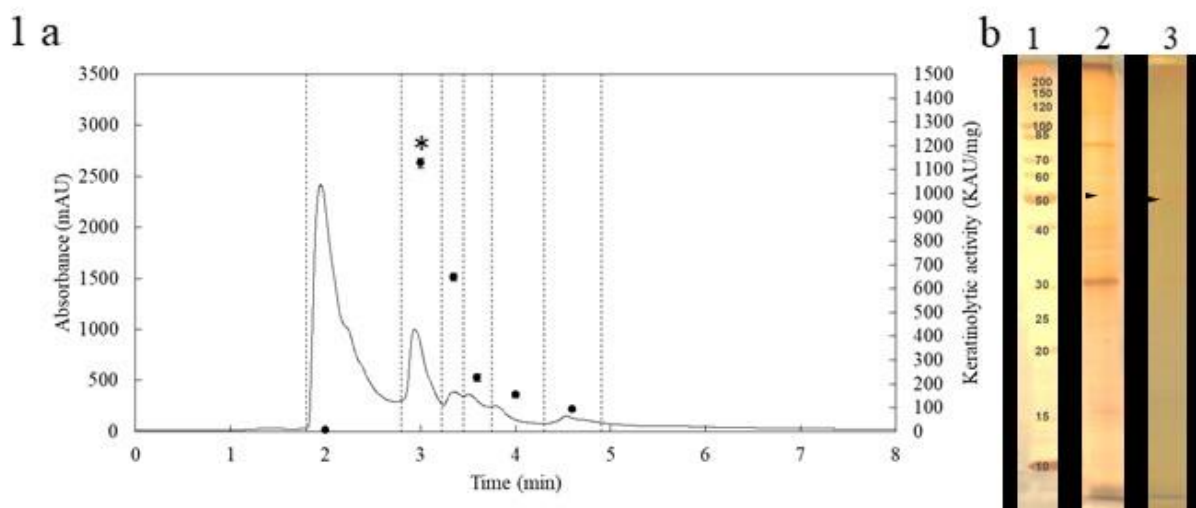
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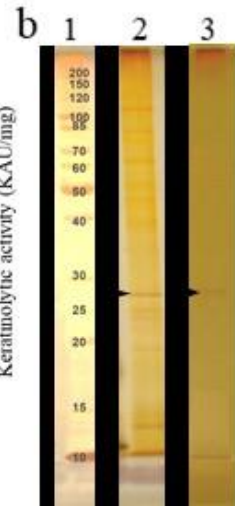
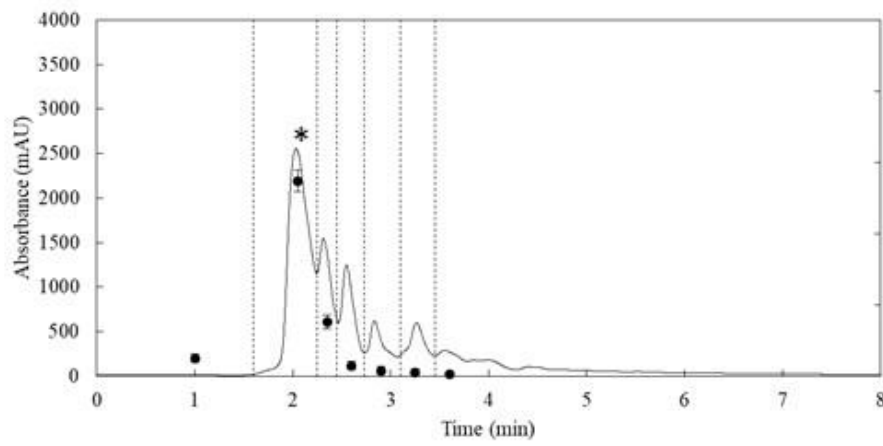
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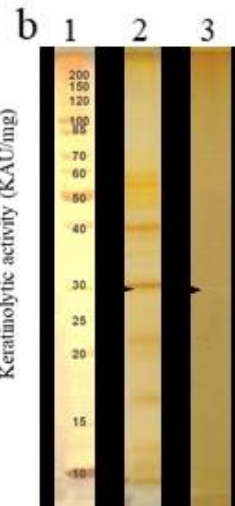
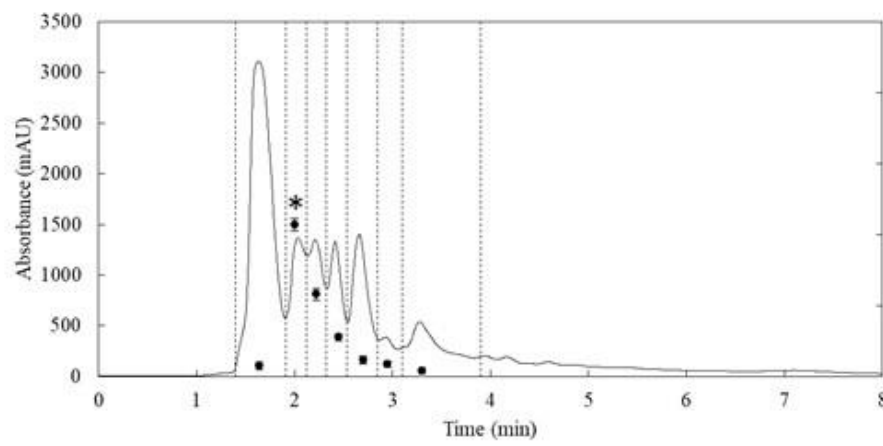
Detection of molecular weights of keratinases from our isolates 1: S3014 (*A. reticulisporus*); 2: S3027 (*B. wiedmannii*); 3: S3018 (*S. coelicoflavus*); 4: RS3014 (*B. altitudinis*). **a** Chromatogram of the culture supernatant from the second purification step on ion exchange HPLC (absorbance at 226 nm). The obtained fractions are separated by vertical lines and the corresponding keratinolytic activities (KAU/mg) are shown for each fraction (●). Results are the average of 3 replicates with error bars to indicate the standard deviation (n = 3), **b** SDS-PAGE showing possible keratinase from the isolate after two-step ion exchange chromatography purification. **lane 1** Protein ladder with labelled molecular weights in kDa, **lane 2** 10x concentrated load on the cation exchange column with labelled potential keratinase, **lane 3** Active fraction (\*) from cation exchange chromatography with labelled potential keratinase



2 a



3 a



4 a

