Ǔ-amylase producing strain isolated from soil under suitable conditions. This study will very helpful for upcoming researchers to uncover the various aspect of enzyme production by microorganism. The present investigation was undertaken with an aim to produce higher amount of amylase with pure compounds in submerged fermentation To screen the isolates for promising Ǔ-amylase producing capability and one of the most promising isolate is further scale up.

Amylase constitutes a class of industrial enzymes having approximately 20% of the enzyme market. Ǔ-amylase has found its application in a range of industries including food, brewing, distilling industry, textile, paper pharmaceutical and bioconversion of solid waste etc. Microorganism used in present investigation, isolated from rhizospheric regions of giant newar variety of *Raphanus sativus* grown in district Jaunpur, (Uttar Pradesh) India. A total of 30 natural isolates were scanned for Ǔ-amylase activity out of which 20 isolates were biochemically characterized. Based on ribotyping all the isolates were identiýed and one of the most promising amylase producer,

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### Genomic DNA extraction and ampli ed ribosomal DNA restriction analysis (ARDRA)

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**Figure 1:** Isolate RR9 (*B. licheniformis* showing maximum zone of hydrolysis on starch agar plate).

**Figure 2:** Clustering based on ARDRA. **a)** Restriction patterns of PCR-ampliýed fragments of 16S rDNA digested with (i) *Hha*I, (ii) *Rsa*I and (iii) *Bst*UI. Lane name with respective isolates; M (100 bp ladder) **b)** Dendrogram showing the clustering of 20 bacterial isolates from radish rhizosphere generated from restriction analysis of 16S rDNA amplicon, using the UPGMA algorithm and the Jaccard's coeýcient.

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## Conclusion

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