# List of tables

#### **General Introduction**

Table G1. Source of amylases

Table G2. List of different commercially available amylases

**Table G3.** Review of literatures on  $\alpha$ - amylase

Table G4. Patent on amylase

## Chapter 1:

**Table 1.1.** Collection of soil sample from different sites of Midnapore

**Table 1.2.** Selection of different fungal strains on basis of clear zone formation

Table 1.3. Selection of fungal strain after primary screening

**Table 1.4.** Production list of amylase by primary selected fungi in potato peel containing liquid medium

**Table 1.5.** Phenotypic and microscopic characteristics of potential fungal strain RPB7

#### Chapter 2:

**Table 2.1** Production of amylase by using different low cost starchy materials

**Table 2.2.** Experimental design used in RSM studies by using four independent variables each at three levels showing observed predicted values of acidophilus  $\alpha$ - amylase production by *Aspergillus niger* RBP7

**Table 2.3.** Analysis of varience (ANOVA) for acidophilic  $\alpha$ - amylase production by *Aspergillus niger* RBP7 in SSF

**Table 2.4.** Experimental design used in RSM studies by using four independent variables each at three levels showing observed predicted values of acidophilus  $\alpha$ - amylase production by *Aspergillus niger* RBP7 in SmF

**Table 2.5.** Analysis of variance (ANOVA) for for acidophilic  $\alpha$ - amylase production by *Aspergillus niger* RBP7 in SmF

Table 2.6. Comparison between amylase productions by different fungal strain

## Chapter 3:

**Table 3.1.** Purification profile of acidophilus  $\alpha$ - amylase from Aspergillus niger RBP7

**Table 3.2.** Effect of additives and metal ions on purified acidophilus  $\alpha$ - amylase of *Aspergillus niger* RBP7

**Table 3.3.** Comparison of different characters of fungi

## Chapter 4:

**Table 4.1.** Composition of different commercially available amylase enzyme

**Table 4.2.** Comparison among  $\alpha$ -amylase from *Aspergillus niger* RBP7 with the commercially available Diastase based on their catalytic activity

**Table 4.3.** Comparison of  $\alpha$ -amylase from *Aspergillus niger* RBP7 with the commercially available Diastase

Table 4.4. Application of purified RBP7 amylase on different industrial wastes

### Chapter 5:

**Table 5.1** Protein sequence retrieval of  $\alpha$ -amylase and acidophilus  $\alpha$ -amylase from different biological sequence and structure databases