

## CHAPTER 5. CONCLUSION

The selected bacterial strain of isolate-5 was identified as *Pseudomonas fluorescens*. Good bacterial growth and biodegradation of carbaryl were observed at 34 °C. Highest bacterial growth was observed at pH 7.2. No mutant was found in mutation study with UV irradiation. There was no enhancement of carbaryl biodegradation found when two other carbamate insecticides, viz. carbosulfan and carbofuran were added. This bacteria was able to use the intermediate metabolite of carbaryl, 1-naphthol as a sole source of carbon and nitrogen. Strain growth and biodegradation of carbaryl were in MM in the presence of vit. B<sub>6</sub> than in the presence of vit. B<sub>1</sub> and nicotinamide. DNA was isolated from this *Pseudomonas fluorescens*.