ABSTRACT

INTRODUCTION

DEFINITION OF THE PROBLEM

OBJECTIVES

MATERIALS AND METHODS

RESULTS

I. Distribution and enumeration of purple non-sulfur bacteria from a few paddy soils of Andhra Pradesh, India.
II. Characterization and identification of a purple non-sulfur bacterial isolate.
III. Effect of oxygen on the nitrogenase activity of Rhodobacter sp. JA2 and Synechocystis sp. ARM 340.
IV. Effect of herbicides on the nitrogenase activity of Rhodobacter sp. JA2 and Synechocystis sp. ARM 340.
V. Influence of herbicides on the growth of Rhodobacter sp. JA2 and Synechocystis sp. ARM 340.
VI. Influence of a few N-heterocyclic aromatic compounds on the nitrogenase activities of Rhodopseudomonas palustris JA1 and Synechocystis sp. ARM 340.
VII. Regulation of nitrogenase activity of Rhodopseudomonas palustris JA1 by pyrazine-2-carboxylate.
VIII. In vitro light and dark nitrogenase activities of few flooded paddy soils.
IX. Regulation of In vitro nitrogenase activities by organic carbon amendment and oxygen.
X. Effect of a few herbicides on the In vitro soil nitrogenase activities.
XI. Regulation of in vitro soil nitrogenase activity by pyrazine-2-carboxylate.

DISCUSSION

CONCLUSIONS

PUBLICATIONS

REFERENCES