APPENDICES
APPENDIX - 1

1. Preparation of buffers:

Citrate buffer of pH 5 and 5.2 was used in the enzymological studies.

For PG and PMG enzyme (pH 5.2)

Stock solution A = 0.1 M solution of citric acid
= 21.01 g dissolved in 1 litre of distilled water.

Stock solution B = 0.1 M solution of sodium citrate
= 29.4 g dissolved in 1 litre of distilled water.

For Cellulase enzyme (pH 5.0)

Stock solution A = 0.055 M solution of citric acid
= 11.55 g in 1 litre of distilled water.

Stock solution B = 0.055 M solution of sodium citrate = 16.17 g dissolved in 1 litre of distilled water.

For both the pH values (pH 5.0 and 5.2) the stock solutions were mixed in the following proportion and finally adjusted with the help of a pH meter.

Stock solution A = 7 ml
Stock solution B = 13 ml

2. Preparation of dinitrosalicylic acid (DNS) reagent:

The 100 ml reagent contained:
1 g dinitrosalicylic acid,
200 mg phenol,
50 mg sodium sulfite and
1 g sodium hydroxide.

The reagent was prepared by placing all solid components in a container and dissolving them simultaneously by stirring with the required volume of sodium hydroxide solution. The sulfite being added to aliquots just prior to the time when the reagent was to be used. The reagent was stored in a stoppered bottle at 4°C.

APPENDIX - II

1. **Sources of sodium polypectate, pectin and carboxymethyl cellulose (CMC)**

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<thead>
<tr>
<th>Substances</th>
<th>Sources</th>
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<tbody>
<tr>
<td>Sodium polypectate</td>
<td>Koch-light Lab Ltd., Colbrook, England</td>
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<tr>
<td>Pectin</td>
<td>Fluka Chemie AG CH-9470 Buchs, Switzerland.</td>
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<tr>
<td>Carboxymethyl Cellulose (CMC)</td>
<td>Fluka Chemie AG CH-9470 Buchs, Switzerland.</td>
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2. **Sources of antibiotics and fungicides used in the present studies.**

<table>
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<tr>
<th>Substances</th>
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<tr>
<td><strong>Antibiotics</strong></td>
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<tr>
<td>A. Aminoglycoside</td>
<td>Sarabhai Chemicals,</td>
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<td>1. Reclor</td>
<td>Baroda, 390 007</td>
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<td><strong>Tetraacyclines</strong></td>
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<td>1. Sporen</td>
<td>Dey's Medical stores Manufacturing (P) Ltd. Allahabad.</td>
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<td>2. Rubamox</td>
<td>Sigmar Laboratories Prema Chambers, Pune 411 002</td>
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<td>Substances</td>
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<tr>
<td>C. Antifungal antibiotic</td>
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<td>1. Mycostatin</td>
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<td><strong>Fungicides</strong></td>
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<td>Captan</td>
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<td>Dithan M-45</td>
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<td>Guragaon (Haryana)</td>
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<td>Sulfex</td>
<td>Arti Minerals, 15/7 Mathura Road,</td>
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<td>Faridabad</td>
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<td>Thiram</td>
<td>Swarup Chemicals (P) Ltd., Water Work Road, Aishbagh, Lucknow, 226004.</td>
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