Appendix A - Medical Marijuana Microbial Testing Plan flowcharts

Medical Marijuana Microbial Testing Plan

Target Organisms

Poole Sample

Aerobes
- E. coli
- Pseudomonas spp.
- Salmonella spp.

Bile Tolerant Gram Negative
- Klebsiella spp.
- E. coli
- Pseudomonas spp.
- Salmonella spp.

Clostridium botulinum
- C. botulinum

Enterococcus spp.
- Enterococcus spp.

Thermophilic Actinomycetes
- Thermophilic Actinomycetes

Aerobic Plate Counts

Mold Plate Counts
- Aspergillus spp.
- Mucor spp.
- Penicillium spp.
Appendix A - Medical Marijuana Microbial Testing Plan flowcharts

Medical Marijuana Microbial Testing Plan

Media Needed

Pooled Sample

Trypticase Soy Broth
  - MacConkey Broth
  - Cetrimide Agar
  - RV Enrichment Broth

Ent. Enrich Broth Moyer

Reinforced Clostridial Medium

Trypticase Soy Broth
  - Violet Red Bile Glucose Agar

Columbia Agar

Streptococcus Selection Agar

Trypticase Soy Agar

Trypticase Soy Agar

Aerobic Plate Count

Mold Plate Count

Sabouraud Dextrose Agar

Sabouraud Dextrose Agar

Sabouraud Dextrose Agar
Appendix A - Medical Marijuana Microbial Testing Plan flowcharts

Medical Marijuana Microbial Testing Plan

Incubation Conditions

- Pooled Sample
  - 30-35°C, 48 hours
  - 20-25°C, 2.5 hours, 30-35°C, 48 hours
  - 80°C, 10 minutes, 30-35°C, 48 hours, Anaerobic
  - 30-35°C, 48 hours, 5% CO₂
  - 50-55°C, 3-5 days
  - 30-35°C, 72 hours
  - 20-25°C, 3-7 days

- 42-44°C, 24-48 hours
  - 30-35°C, 18-24 hours

- 30-35°C, 18-72 hours

- 30-35°C, 18-24 hours

- 3,0-35°C, 18-24 hours
  - 30-35°C, 18-24 hours
  - 30-35°C, 18-24 hours

- 30-25°C, 3-7 days
  - 3,0-35°C, 18-24 hours

- 30-25°C, 3-7 days

- 30-25°C, 3-7 days

- 30-25°C, 3-7 days

- 30-25°C, 3-7 days
Appendix A - Medical Marijuana Microbial Testing Plan flowcharts

Medical Marijuana Microbial Testing Plan

Organism Identification Assays

- Pooled Sample
  - Aerobes
    - API 20E
    - API 20E
    - API 20E
  - Bile Tolerant Gram Negative
    - API 20E
    - API 20E
    - API 20E
  - C. botulinum
    - API 20A
    - API 20Strep
    - Gram Stain
  - Enterococcus spp.
  - Thermophilic Actinomycetes
    - Aerobic Plate Counts
    - Mold Plate Counts
  - RT-PCR
  - RT-PCR
  - RT-PCR

NYS DOH LEB-600 series, Medical Marijuana Testing Matrix, (reference: LEB-AP-603B; 10/18/18)
Appendix A - Medical Marijuana Microbial Testing Plan flowcharts

Medical Marijuana Microbial Testing Plan

General Set-Up

AB – Aspergillus brasiliensis ATCC 16404
KP – Klebsiella pneumoniae ATCC 13883
CS – Clostridium sporogenes ATCC 11437
EC – Escherichia coli ATCC 8739
PA – Pseudomonas aeruginosa ATCC 9027
ST – Salmonella typhimurium ATCC 14028
EF – Enterococcus faecalis ATCC 29212
TV – Thermoactinomyces vulgaris ATCC 43649

20 doses pooled
10-15 doses tested
5-10 doses archived