

Analysis of Microbial Colonies with Plate Sieve

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Categories:

- Biotechnology
- Computer Technology

Keywords:

- Algorithm
- Bacterial Identification
- Biotechnology
- Colony Analysis
- Medical/Health
- Software

There is increasing use of technology and computers to document activity and growth of biological processes. The use of location algorithms to verify a bacterial colony on a plate allows a user to monitor colony growth over extended periods from hours to days. This would be fast and efficient in any research setting that utilizes bacterial colony identification systems.

In need for such a system, researchers at Purdue University have developed a computer implemented technology that uses time stamps and location algorithms to identify bacterial colonies on a plate and locate the same colonies on subsequent timed data points for a rectangular plate. This software displays colonies and all colony light scatter patterns for that plate on the screen while identifying each colony on an image of the plate that is being viewed. By using a processor, areas in the first and second image would correspond to possible microbial colonies, and hence, a colony map is generated. There are currently no existing technologies that compare to this technology, making this beneficial and novel for research with microbial colonies.

Advantages:

- Use of time stamps and location algorithms
- Efficient identification of colonies
- Generation of colony maps

Potential Applications:

- Research Labs
- Medical/Health
- Drug Development

People:

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Intellectual Property:

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