

Valve Method for Seed Decantation

ID: 2012-073

Executive Statement:

A novel device and method for efficiently separating seeds from mineral soil using a ball valve mechanism.

Technology Overview:

The valve method is an innovative approach to decanting seeds from a flotation solution, utilizing a device that employs a ball valve to effectively flush mineral debris away from seeds. This method outperforms traditional net-skimming techniques by reducing bias and enhancing the speed and efficiency of seed recovery. Developed at Brigham Young University, this technology represents a significant advancement in the field of agricultural research and seed bank analysis.

Key Advantages:

- Increased efficiency and speed in seed recovery
- Reduction in bias compared to traditional methods
- Improved effectiveness in separating seeds from mineral soil
- Enhanced replicability and accuracy in research studies

Problems Addressed:

- Inefficiencies and bias in seed recovery processes
- Low effectiveness of traditional net-skimming techniques
- Challenges in ensuring research replicability and accuracy due to inconsistent decantation methods

Market Applications:

- Agricultural research and development
- Seed bank analysis and management
- Environmental and ecological studies
- Plant and wildlife science education and research