

Agri-Prep

SAMPLE PREPARATION FOR AGRICULTURAL & PLANT RESEARCH LABS

WWW.SPEXSAMPLEPREP.COM/AGRI



SPEX SamplePrep is an industry leader in sample preparation products for agricultural / plant research and testing labs. Our powerful homogenizers, grinders and cryogenic mills provide reliable, reproducible results without cross contamination.

Applications include:

- :: DNA/RNA Extraction
- :: Pesticide extraction
- :: Protein Extraction
- :: Disease research
- :: Food safety
- :: Biofuels
- :: Environmental studies
- :: Food adulteration/origin

FEATURES

The **Geno/Grinder®** has an adjustable clamp that gives the user increased flexibility for running titer plates or different sized vials. For smaller sample demand the MiniG is available. **Kryo-Tech® accessories** can be used to preserve temperature sensitive samples such as RNA and proteins.

Customer Types: Crop research companies, pesticide & fertilizer manufacturers, environmental & agricultural testing agencies.

Product synergy: DNA & pesticides separation (centrifuges), amplification (PCR) and sequencing (NGS) equipment. Mass Spectrometers for protein analysis. GC-MS for pesticide analysis.

Typical samples: For DNA/RNA proteins, 96 well titer plates, 2mL, 5mL vials. For pesticides 50mL falcon tubes following the QuEChERS method. See our QuEChERS video in the QR code.

Typical grinding media: Steel balls for tougher tissue samples, silica or ceramic beads for softer samples and spores.

Applications include: DNA/RNA or protein extraction from plant tissue samples for disease research and genetic modification studies. Pesticide residue extraction for food safety. Food adulteration and origin testing.

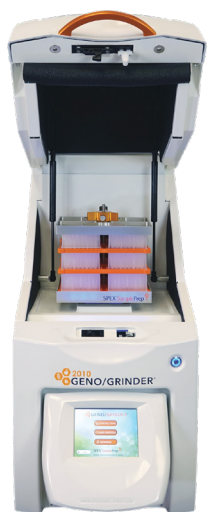
DNA extraction in the Geno/Grinder®



Spelt seeds before grinding



Spelt seeds after grinding



2010 GENO/GRINDER®

High Throughput
Tissue Homogenizer



Kryotech accessories



Scan this QR code to see the Geno/Grinder in action.



Scan this QR code to learn how to use the Geno/Grinder for QuEChERS

SPEX® SamplePrep®

WWW.SPEXSAMPLEPREP.COM



FREEZER/MILL®

CRYOGENIC GRINDER

6875
FREEZER/MILL®
Single chamber: 0.1-100 grams



6875D
FREEZER/MILL®
Dual chamber: 0.1-200 grams



6775
FREEZER/MILL®
Single chamber: 0.1-5 grams

Scan the QR code to see the Freezer/Mill in action



8000M
Mixer/Mill®
HIGH-ENERGY BALL MILL



Scan the QR code to learn more about the Mixer/Mill

FEATURES

The **Freezer/Mill®** grinds tough or temperature sensitive samples at cryogenic temperatures. This mill is able to process the toughest plant samples quickly and effectively that are ungrindable at room temperature.

Product synergy: DNA separation (centrifuges), amplification (PCR) and sequencing (NGS) equipment. Mass Spectrometers for protein analysis. GC-MS, ICP for QC labs testing elemental or organic composition.

Customer Types: Agricultural testing agencies, Crop research companies and Contract testing labs.

Typical samples: Wood, roots, cotton, tough seeds and fibrous samples (palm leaves and sugar cane).

Typical sample size/format: 5-100g

Applications include: DNA/RNA or protein extraction. Environmental contamination testing. Biofuels energy content.

Wood processed in the Freezer/Mill®



Wood sample before



Wood sample after

FEATURES

The **Mixer/Mill®** is the ideal solution for both R&D and testing labs that need a basic ball mill for grinding. This high energy ball mill is capable of grinding dry or hard samples to fine homogenous powder.

Product synergy: GC-MS, ICP, acid digestors.

Customer Types: Environmental testing agencies, tobacco companies and crop research companies.

Typical samples: Dry plant samples (tobacco, grass), nuts, tree bark

Typical sample size/format: 1-20g, steel or non-metallic vials.

Applications include: Environmental testing for elemental and organic contamination.