

hay

Protocol number: M0098191
Industry: Biology, Agriculture and forestry
Feed Size: 10 - 20 cm
Desired Fineness: < 0,25 mm
Quantity: < 100 g
Recommendation: For this kind of sample, we recommend using a cutting like PULVERISETTE 15 or Universal Cutting Mill PULVERISETTE 19.

Result 1

Cutting Mill PULVERISETTE 15

Rotor with straight cutting edges and fixed knives made of tool steel
+ sieve insert 0,75 mm trapezoidal perforation made of stainless steel



Feed quantity: 19 g
Feed Size: 10 - 20 cm
Grinding time: 1 min
Final fineness: < 0,75 mm
Comments: Complete sample amount has been ground within 60 seconds. Sieve insert and grinding chamber are mainly free of residues. A rapid cleaning can be performed by vacuuming with a soft brush.

For a comminution of up to 100 g of sample, about 4-5 minutes might be needed.

Result 2

Cutting Mill PULVERISETTE 15

rotor with straight cutting edges and fixed knives made of tool steel
+ sieve insert: 0,5 mm trapezoidal perforation made of stainless steel



Feed quantity: 30 g
Feed Size: 10-20 cm
Grinding time: 1 min
Final fineness: < 0,5 mm
Comments: Instead of a 0,75 mm sieve insert as used in result 1, a 0,5 mm sieve insert has been used for this trial.
Complete sample amount has been ground within 60 seconds. Sieve insert and grinding chamber are mainly free of residues. A rapid cleaning can be performed by vacuuming with a soft brush.

We are guessing that a comminution of up to 100 g of sample will also take about 4-5 minutes.

Result 3

Cutting Mill PULVERISETTE 15

rotor with straight cutting edges and fixed knives made of tool steel
+ sieve insert 0,25 mm trapezoidal perforation made of stainless steel



Feed quantity: 27,5 g
Feed Size: 10-20 cm
Grinding time: 1 min
Final fineness: < 0,25 mm
Comments: In our last trial, a 0,25 mm sieve insert has been used for the comminution of sample. Just the previously performed trials, the complete sample amount could be ground within one minute.
With all 3 trials, some particles have been able to pass the openings of the sieve insert longitudinal. For this, still longer pieces can be found after grinding.

We are guessing that also about 5 minutes should be necessary to grind 100 grams of sample.

Contact to our Applications Laboratory: Leos Benes · Phone: 0049 67 84 70 122 · benes@fritsch.de

