



Protocol for Wet (Fresh) Flower Potency Testing

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If you are a hemp grower, then during the two or three weeks before harvest, you should be testing your product daily to minimize the chance of harvesting crop with Total THC levels above the legal threshold of 0.3%.

Sending samples to an external lab is costly and can take a few days before you get results. By then, your crop's THC levels are higher.

The GemmaCert Protocol for Wet (Fresh) Flower Potency Testing is a practical solution for analyzing crop potency within 24 hours at a fraction of the cost of an external lab.

IMPORTANT: the CBD:THC ratio is determined genetically and does not change during plant development. The CBD:THC ratio is 1:24 - 1:30. Therefore, CBD potency is a reliable indicator for THC potency. You rarely find a flower with more than 8% CBD with a THC potency below 0.3%.

We recommend that you determine optimal harvest time taking into consideration both THC and CBD potency levels. **If your CBD potency has reached 7%, you should harvest.**

If you are medical or recreational cannabis grower, then you may also seek to time your harvest just right to achieve a desired potency level. The same protocol below will also be useful for you.

Wet (Fresh) Flower Protocol for Potency Testing with GemmaCert

This protocol is recommended for using GemmaCert to estimate Total THC and Total CBD levels in wet flower in the weeks prior to harvest to assist in scheduling the optimal harvest date. *

First, we urge you not to dry flowers under direct sunshine or by using a microwave/oven.

The optimal drying process should be gradual and extended over a 24-hour period.

A whole plant dries within 24 hours to reach about 15% moisture when spread evenly to a depth of approximately 6 inches (15 cm) at 105°F (40°C). If hung to dry, in 36 hours at 86°F (30°C), 15% moisture is achieved. Fresh flowers, stored in paper bags at 70°F (21°C) and 40% humidity, will reach about 11% moisture in 5 days.

Therefore, we recommend a semi-air-drying protocol for reliable and quick results:

1. Flower buds should be cut into a few chunks (not shredded) and placed or wrapped in a paper bag.
2. Then place the paper bag in a relatively warm place with a temperature of about 86°F (about 30°C). If an incubator is unavailable, then just place it next to a heater on low temperature or even on top of an appliance like a TV.
3. The buds should be dry in 24 hours and ready for potency analysis by GemmaCert. Make sure that you are not exposing the flowers during the drying process to temperatures which exceed 150°F degrees (65°C) as it may cause the decarboxylation of cannabinoid acids and lead to an inaccurate measurement. Also, the humidity of the surrounding area should not exceed 50% as it may harm the drying process.

* This protocol does not replace a proper curing process and testing of the final dry product.