



# Cornell Hemp

<http://hemp.cals.cornell.edu>

## Evaluation of hemp grain and fiber cultivars in New York State in 2021

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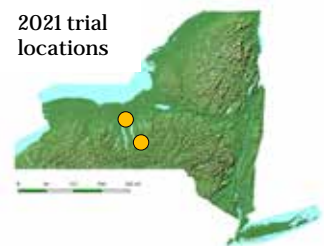
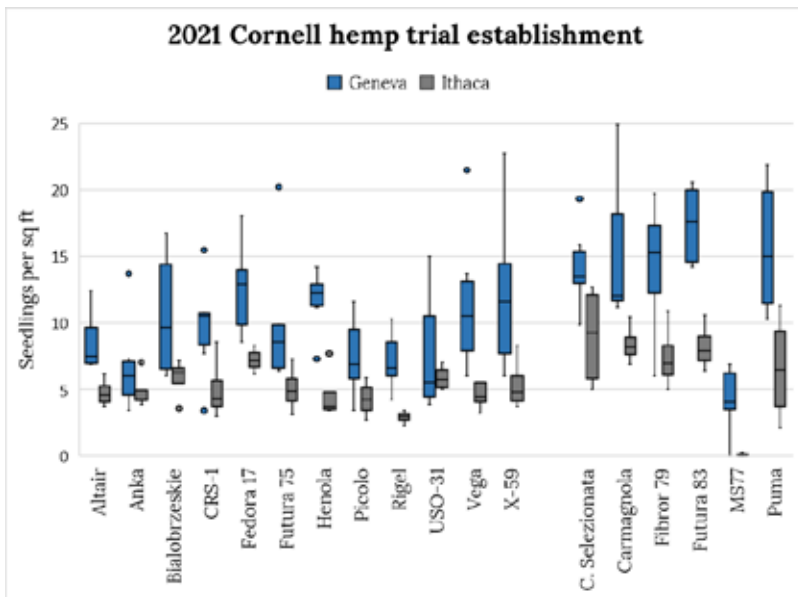
### Locations:

**Ithaca, NY:** 37 grain, dual-purpose, and fiber hemp cultivars were seeded in replicated small plot trials at the Cornell University Agricultural Experiment Station. These trials were conventionally managed with 75 lbs N as 22-9-9 applied pre-planting and 75 lbs N as ammonium sulfate (22-0-0) applied 4 weeks after establishment.

**Geneva, NY:** 18 grain, dual-purpose, and fiber hemp cultivars were seeded in replicated small plot trials at Cornell AgriTech. These trials received 75 lbs N as pelleted composted chicken manure (Kreher 5-4-3) pre-planting.

### Stand establishment:

Planting was accomplished using a cone seeder at 20 live seeds/ft<sup>2</sup> for grain and dual purpose with a goal of 15 seedlings/ft<sup>2</sup> and 40 live seeds/ft<sup>2</sup> for fiber cultivars with the goal of 30 seedlings/ft<sup>2</sup>.



Ithaca (McGowan) – June 7  
Tile drained silt and fine sandy loam  
Geneva (RN) – June 11  
Well drained to moderately well drained loam

## 2021 growing season so far:

While initial establishment in Geneva was far better than that in Ithaca, heavy rains in the month of July saturated soils (see figure). The trials in Geneva were established on a flatter field that was unable to drain. Parts of the trial suffered from extreme stunting (Photo 1). The trials in Ithaca were planted on a slight slope so excess water could run off (Photo 2).

The trials in Ithaca were planted on a slight slope so excess water could run off (Photo 2).

## Harvest yield and quality assessment:

We will harvest the grain and dual-purpose plots with a small plot combine, weigh dry grain, and then analyze for oil and protein content. Fiber types will be cut with a sickle bar, retted, and weighed. Female flowers in each plot will be tested for cannabinoids including THC and CBD.

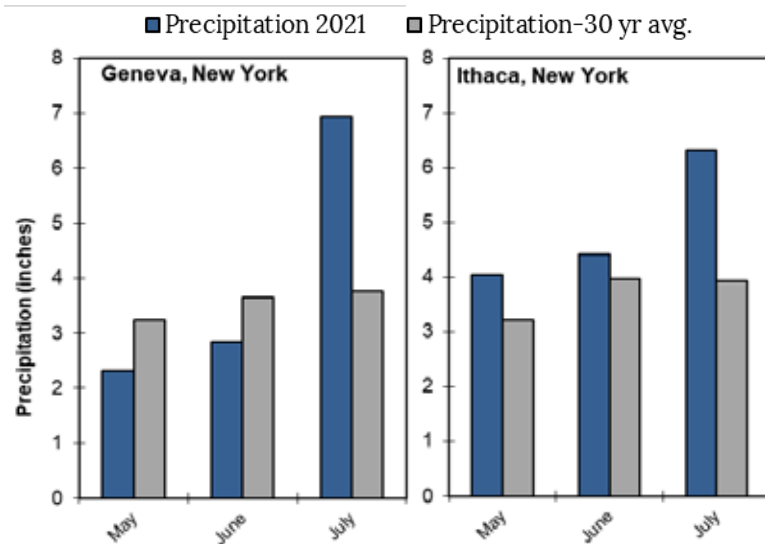


Photo 1: 2021 fiber trial in Geneva, NY



Photo 2: 2021 fiber trial in Ithaca, NY

We have received grain and fiber hemp seed from the following companies:

Company	Website
Fiacre Enterprises	<a href="https://fiacre-enterprises.com/">https://fiacre-enterprises.com/</a>
Hemp Genetics International*	<a href="https://hempgenetics.com/">https://hempgenetics.com/</a>
Hemp Harvest Works	<a href="https://hempharvestworks.com/">https://hempharvestworks.com/</a>
IND Hemp, LLC.	<a href="https://www.indhemp.com/">https://www.indhemp.com/</a>
International Hemp	<a href="https://www.international-hemp.com/">https://www.international-hemp.com/</a>
King's AgriSeeds Inc.	<a href="https://kingsagriseeds.com/">https://kingsagriseeds.com/</a>
Parkland Industrial Hemp Growers*	<a href="https://pihg.net/">https://pihg.net/</a>
Rohrer Seeds and Supplies	<a href="https://rohrerseeds.com/">https://rohrerseeds.com/</a>
Schiavi Seeds	<a href="https://www.schiaviseeds.com/">https://www.schiaviseeds.com/</a>
Seedway, LLC.	<a href="https://www.seedway.com/">https://www.seedway.com/</a>
UniSeeds, Inc.*	<a href="http://www.uniseeds.ca/en/">http://www.uniseeds.ca/en/</a>



\* Companies also have hemp breeding programs in addition to being seed distributors