

2020 CBD Hemp Harvest Timing at Minot

Summary: The trial was set up as a randomized complete block design with 3 replications and planted on June 12 with two experimental CBD hemp strains that were propagated from feminized seed and planted as 6 inch transplants or propagated as clones from a single mother plant. Clones were 1 to 4 inches tall when planted and many of these did not survive. Growing conditions were generally mild (avg 64F) and dry (6.6") from June 1 through September 30. Harvest intervals were approximately 11 days apart and consisted of hand harvesting individual plants, drying at 80F for 5 days and collecting dry foliage / bud biomass. *A sub-sample of this biomass will be analyzed for THC, CBD and total cannabinoid content when funds become available.* There was a lot of phenotypic variability within the feminized seed transplants as far as plant height and shape. This variability carried through harvest, resulting in no obvious trend or statistical differences for biomass yield between harvest dates. Data from the clonal production is shown, however, there were not enough harvested plants to perform a good statistical analysis on. In conclusion, this data would suggest that delaying harvest does not increase biomass yield, however, this may very well be related to a lack of late season precipitation. This data should be viewed with caution until additional information can be generated.

Transplant Production

Harvest Date	N	Plant Height	Total THC	Total CBD	Total Cannabinoids	Dry Plant Weight	Dry Biomass**
	*	inches	%	%	%	lbs/plant	lbs/plant
September 3	6	66	--	--	--	2.02	0.94
September 14	6	68	--	--	--	2.47	1.11
September 25	6	69	--	--	--	2.09	1.06
October 6	6	60	--	--	--	1.78	1.02
October 16	6	67	--	--	--	1.60	0.96
October 27	5	71	--	--	--	2.41	1.34
Trial Mean		67	--	--	--	2.05	1.06
C.V. %		17	--	--	--	35	31
LSD 0.05		NS	--	--	--	NS	NS

*Total number of harvested plants used in this analysis.

** Dry Biomass = average per plant weight of dried foliage with stems removed.

NS = No statistical difference between harvest dates.

Clonal Production

Harvest Date	N	Plant Height	Total THC	Total CBD	Total Cannabinoids	Dry Plant Weight	Dry Biomass**
	*	inches	%	%	%	lbs/plant	lbs/plant
September 3	6	50	--	--	--	1.39	0.75
September 14	3	52	--	--	--	0.95	0.55
September 25	3	44	--	--	--	0.87	0.61
October 6	2	34	--	--	--	0.33	0.25
October 16	2	34	--	--	--	0.46	0.33
October 27	1	25	--	--	--	0.28	0.19

*Total number of harvested plants used in this analysis.

** Dry Biomass = average per plant weight of dried foliage with stems removed.

Planting Rate: 5' rows and 5' between plants (1742 plants/A)

Production System: Outdoor. No supplemental irrigation.

Weed Control: Clipping (lawn mower)