

ATLAS SEED

· Cannabis Bred for Agriculture ·

PHOTOPERIOD STRAIN GUIDE

— Bred by Farmers, For Farmers —
ATLASSEED.COM



COMPANY BACKGROUND

Atlas Seed breeds and produces agronomically oriented day-neutral & fast finishing photoperiod cannabis and hemp varieties for the global production market, focusing primarily on highest yields, mold resistance, and potency. Cannabis Bred for Agriculture.

Atlas Seed was founded by seasoned winegrape, vegetable, and cannabis farmers in Sonoma County, California that were searching for genetics that didn't yet exist: uniform, stable, & vigorous hybrids that would fit into their existing, time tested agricultural model.

Atlas now boasts a state of the art, dedicated breeding program with continuous improvements to inbred parent lines delivering industry leading field adaptability and stability with uniform performance and cannabinoid production. Atlas is actively forming partnerships with nurseries nationwide to make their genetics available in every legal growing state. When you choose Atlas Seed, you're choosing field scale cannabis genetics bred by farmers, for farmers.

AGRONOMIC REVIEW

Genetic Background

Our photo-determinant lines are the fl cross between high potency photoperiod lines and fully autoflowering lines that have been selected for high potency. The population is still dependent on light cycle changes for flower initiation (the same as traditional photoperiod lines) though on average they finish 2-4 weeks earlier than their fully photoperiod parent. For this reason we often refer to these lines as our fast flowering photos.

Outbreeding Enhancement

One of the main benefits of crossing our deliberately selected autoflowering and photoperiod lines is the capture of hybrid vigor. Also known as outbreeding enhancement, hybrid vigor increases our photoperiod line's growth rate and general robustness. See notes below on managing vigorous growth habits.

Feminized Seed

All of our fast flowering photoperiod seed is feminized. Feminization rates run between 1:1000 and 1:4000. For more information on properly identifying males in an at scale population see our Male Hunt Guide.

High Potency Hybrids

We source and select our high potency photoperiod clones (25%+) from nursery and farm partners. We then cross photoperiod donors with f4-f7 autoflowering parent lines. Chemotyping is performed at inbreeding and outcrossing stages to ensure the highest potency progeny possible. Expected potency is 18-28% and is strain dependent. Please see our White Paper on potency for a detailed discussion of this topic.





PHOTOPERIOD PLANT SPACING

Spacing is dependent upon strain, planting date, and expected growing conditions. For any field planting in May or Early june we recommend 1 row spacing at 3'-5' center. For all other planting consider:

- Wind
- Humidity
- Trellising capacity
- Expectation for rain
- How aggressively you plan to top
- Temperatures, especially night time

Taking the above into consideration for mid/late June plantings we recommend a few options:

- 1 row at 3'-4' on center
- 2 rows at 3'-4' on center

For mid/late July plantings we recommend:

- 2 rows at 3'-4' on center
- 2 rows on 2' center

GROWTH MANAGEMENT

These crosses are EXTREMELY vigorous. You may want to top or hedge repeatedly and heavily. Plan to cut back 1'-2' multiple times, depending on planting date, conditions, and desired canopy height. Depending on your scale and conditions you may want to use a hedge cutter or sickle bar mower.

If you cultivate in wind, humidity, or regions that get rain during the flowering cycle, we recommend trellising.



NOTES ON OUTCOME VARIATION

The data we present in the guide is what we believe is most representative of what most growers can expect. However, keep in mind that the following variables will affect your outcome:

- <u>Establishment Success</u>:
 - Direct seeding and / or transplanting your plants properly is a huge determinant of success in establishing healthy plants.
- Environmental Differences:
 - As a grower you will see significant outcome variations with our strains at different latitudes, microclimates, and especially if you are growing indoor versus outdoor.
- Yield vs. Potency:
 - The maturity times we've listed are for peak season outdoor climates, and for when we think your optimal yield and potency will be. Keep in mind that as your crop ripens past the times listed, you will see increasing yields and possibly decreasing potency. We recommend all growers test for potency often in the final phases of growth.
- Night time air and soil temperatures will affect your vegetative growth and your peak potency potential.



PHOTOPERIOD PRICING



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MOQs: 500 seeds wholesale or \$500 for seed packs

Pack Size	Price per Seed Wholesale	Wholesale Seed Pack Pricing	Retail Seed Pack Pricing	
3	\$6.00	\$18	\$36	
5	\$5.50	\$27	\$55	
10	\$5.00	\$50	\$100	
20	\$4.50	\$90	\$180	
100	\$3.50	\$350	\$700	
500 - 1000	\$3.25	-	-	
1,000 - 5,000	\$3.00	-	-	
5,000 - 20,000	\$2.50	-	-	
20,000*+	Custom	-	-	

^{*}For higher volume bulk inquiries please inquire to our sales team for specialized pricing.

Current Strain Availability							
Mendo Breath	Sour Diesel						
Gelato	Blue Dream						
Banana Kush	Fatso						
Cookie Dough	GMO						
Dosido	Pai-Gow						

To place an order, email Sales@AtlasSeed.com or call 707.277.1709

FINISH TIME

Strain Dependant Seeding, Transplanting, & Harvest Program

Here we have outlined a strain by strain program you can follow to ensure you hit the timing outcomes you are seeking within your overall farm plan. Keep in mind that your finish times will be highly dependent on your seeding and transplant dates.

Strain	Mold Resistance	Seeding Date #1	Transplant Date # 1	Finish Date #1	Seeding Date # 2	Transplant #2	Finish Date #2	Seeding Date #3	Transplant Date #3	Finish Date #3
Mendo Breath	Fair	5/1-5/10	6/1-6/10	Early Finisher Sept. 1-10	5/15-5/25	6/1-6/10	Early Finisher Sept. 1-10	6/1	6/20-7/5	Late Finisher Oct 1-10
Gelato	Good	5/1-5/10	6/1-6/10	Early Finisher Sept. 1-10	5/15-5/25	6/1-6/10	Early Finisher Sept 1-10	6/1	6/20-7/5	Late Finisher Oct 1-10
Banana Kush	Good	5/1-5/10	6/1-6/10	Early Finisher Sept. 1-10	5/15-5/25	6/1-6/10	Early Finisher Sept. 1-10	6/1	6/20-7/5	Late Finisher Oct 1-10
Cookie Dough	Good	5/1-5/10	6/1-6/10	Early Finisher 1-10	5/15-5/25	6/1-6/10	Early Finisher Sept. 1-10	6/1	6/20-7/5	Late Finisher Oct 1-10
Dosido	Fair	5/1-5/10	6/1-6/10	Early Finisher Sept. 1-10	5/15-5/25	6/1-6/10	Early Finisher Sept. 1-10	6/1	6/20-7/5	Late Finisher Oct 1-10
Sour Diesel	Fair	5/1-5/10	6/1-6/10	Mid Finisher Sept. 10-30	5/15-5/25	6/1-6/10	Mid Finisher Sept. 10-30	6/1	6/20-7/5	Late Late Finisher Oct 10-30
Blue Dream	Fair	5/1-5/10	6/1-6/10	Mid Finisher Sept. 10-30	5/15-5/25	6/1-6/10	Mid Finisher Sept. 10-30	6/1	6/20-7/5	Late Finisher Oct 1-10
Fatso	Good	5/1-5/10	6/1-6/10	Mid Finisher Sept. 10-30	5/15-5/25	6/5-6/15	Mid Finisher Sept. 10-30	6/1	6/20-7/5	Late Late Finisher Oct 10-30
GMO	Good	5/1-5/10	6/1-6/10	Mid Finisher Sept. 10-30	5/15-5/25	6/1-6/10	Mid Finisher Sept. 10-30	6/1	6/20-7/5	6/20-7/5
Pai-Gow	Excellent	5/1-5/10	6/1-6/10	Mid Finisher Sept. 10-30	5/15-5/25	6/1-6/10	Mid Finisher Sept. 10-30	6/1	6/20-7/5	Late Late Finisher Oct 10-30

