



## Case Study: Early Cannabis Sex Determination Genotyping Service

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**Client:** Anonymous

**Service:** Early Cannabis Sex Determination Genotyping

**Objective:** Optimize resource allocation and reduce costs by identifying plant sex early in the growth cycle

### Background

In the highly competitive cannabis cultivation industry, maximizing yields and minimizing costs are essential for success. Many cultivators face significant challenges when male plants go undetected until late in the growth cycle, wasting resources and space that could have been better allocated to female plants. To address this, our client engaged with our early cannabis sex determination genotyping service to identify plant sex during the seedling stage, allowing for the early culling of male plants.

### Solution

Our early sex determination genotyping service provides an efficient and cost-effective solution for identifying the genetic sex of cannabis plants. This allows cultivators to focus resources exclusively on female plants, which are prized for their cannabinoid production, and to eliminate male plants before they consume unnecessary space and resources.

### Implementation

The anonymous client submitted samples for 371 plants for early sex determination genotyping. Using our proprietary testing technology, we were able to identify 229 female plants (61.7%) and 142 male plants (38.3%).

### Results

By identifying and culling male plants early, the client achieved substantial cost savings:

- **Total Cost Saved:** \$17,040
  - Calculated using conservative industry averages, which account for costs that would have been incurred if male plants were grown to maturity prior to culling.
- **Return on Investment (ROI):** 4.5x
  - The savings represented a 4.5 times return on the cost of our genotyping service, highlighting the financial value of early plant sex determination.

### Benefits

- **Optimized Space and Resource Allocation:** By focusing exclusively on female plants, the client was able to allocate growth space and resources more efficiently.
- **Labor Cost Savings:** Reduced the labor associated with late-stage plant maintenance and culling.
- **Enhanced Crop Planning:** With a clear understanding of their plant count, the client could make better-informed decisions about resource allocation and operational planning.

### Conclusion

Our early cannabis sex determination genotyping service provided a high ROI by saving the client \$17,040, representing 4.5 times the cost of testing. This case demonstrates the significant value of early plant sex identification, enabling cultivators to maximize operational efficiency and achieve substantial cost savings in cannabis cultivation.