

## Notes on Opium Poppy

- Proper area for cultivation: Cold climate, high humidity, sufficient sunlight and water. When grown in valley areas, opium plants are healthier, more plentiful, sprout a greater number of bulbs per plant and yield more gum.
- Soil preparation: Soil is prepared into a fine grain with a hoe 5-7 days before seeds are scattered.
- Seed selection: Following the harvest, seeds are chosen from dried poppy bulbs and dried in the sun for use the following year.
- Initial growth: Seeds will sprout 5-7 days after the seeds are planted.
- Growth cycle: Poppy plants complete their growth cycle between 100-120 days depending on weather conditions. For the late or dry season crop, the growth cycle is around 80 days depending on the availability of a water supply for irrigation.
- Flower color: Opium flowers come in various colors but farmers prefer to plant seeds which will produce white and red flowers. The white flower produces a long and thin bulb while the red flower produces a large and thick bulb. The violet flower has a rough bulb texture that is difficult to score with a harvesting knife. The dual-color, white-red flower is said by farmers to produce more gum.
- Weeding: Farmers weed the area around sprouting poppy plants after the initial 30-40 days to stimulate growth and increase the number of bulbs per plant.
- Sunlight: After 30-40 days, opium plants that do not receive sufficient sunlight for 7 days will turn yellow and possibly die.
- Root system: Opium plants that have 2 taproots will yield little or no gum.
- Use of fertilizers: Fertilizer is usually broadcast freely by hand. Application of fertilizers before seeding is said to result in a higher yield. However, opium grown by applying fertilizer before seeding is not favored by addicts for

smoking because it is said to have a sour taste.

- Water supply system: Water is usually supplied by PVC, traditional gravity and/or sprinkler systems which the farmer will discontinue using 10-15 days before the plant is fully mature.
- Plant scoring: Scoring starts one week after flowers drop from the poppy bulb.
- Scoring tools: A hand-made knife with 2-4 blades is used.
- Scoring method: Farmers score the bulb by making a small incision from top to bottom.
- Harvesting method: After scoring, white opium gum will seep out of the bulb. The gum turns dark brown after drying on the bulb overnight. Farmers use a flat-bladed knife (similar to a paint scraper) to scrape the dry gum from the bulb and transfer it to a receptacle such as a piece of "sa" paper.
- Duration of harvest: Once a bulb has matured, it can be scored and harvested up to 3-4 times for the next 20 days. The plant requires 5-7 days between each harvest.
- Damaging rainfall: Excessive precipitation during the plant's growth period or rainfall during harvest causes damaging fungal growth and can rot the plant.
- Opium gum yield: A 0.16 hectare of opium poppy will yield 1-3 joi of raw opium.