Tips on successful germination of your tobacco seeds:

"If you can grow tomatoes, you can grow tobacco!"

First of all, tobacco seeds should not be buried in the soil or medium of choice. Why? Because tobacco seeds **NEED LIGHT AND AIR** to germinate. For best results, your seeds or plants in the garden should have fertile soil with good surface and internal drainage and a southern or southeastern exposure.

Germination: For indoor germination, be sure you are using new sterile soil mix so it is as free of pests, bacteria, and contaminents as possible. Sprinkle seeds evenly over the top of the mix and gently tap down so they are making contact with the soil. You can use a porus material such as Reemay to help maintain moisture and to keep the seeds from being washed away. I use a spray bottle to "mist" them so they aren't being washed away by pouring water from a watering can or hose. Then place a clear cover over the trays so the **SEEDS REMAIN MOIST**. *The lack of sufficient water is perhaps the most frequent cause of inadequate germination or transplant death.* In the field, a light covering of straw can be used.

Seeds should germinate "on average" in about ten days. Some varieties make take two to three weeks to germinate. May take longer if conditions are not right, as much as twice as long so if your seeds are germinating, correct the conditions and you should see improvement in germination.

Tobacco seeds **REQUIRE WARMTH** to germinate. **70 to 80 degrees F**, so a heat mat underneath your trays will certainly help your success rate. Remember, tobacco is a tropical crop, so light, heat, and moisture are required.

I have good germination rate by using a standard shop light with florescent bulbs and hanging them nearly on top of the trays. The florescent bulbs not only provide light but also a gently heat passively to the surface of your growing medium. This worked great on a crop of petunias that I grew from seeds and would work equally well on your seeds. See my short tutorial on **Starting Seeds Successfully** using the methods I described above. Url is listed below my signature.

Transplanting: It is good to plan to have the plants ready for transplanting about May 15 (dependent on when your area is frost free and soil is warmed). Early transplanting, before June 1, is preferred to a later planting because moisture conditions for quick, early growth are usually better. Good stocky plants with a healthy root system are most essential to obtaining a full stand without replanting. strong stocky plants about eight inches long (from ground to top of plant).

Fertilizer: What about fertilizer? First of all you need to know what the nutrients levels are already in your planting area, and that **requires a soil test**. The soil test will indicate the level of nitrogen, phosphorus and potassium in the soil and aid in determining if lime is needed to keep the pH in the desirable range (5.8 - 6.2) and to supply needed calcium and magnesium if levels are low.

Nitrogen usually affects the yield and cured leaf quality of burley tobacco more than any other nutrient. Failure to apply enough nitrogen will result in small plants, early firing, and low yield and quality.

Potassium probably affects the quality or usefulness of the cured leaf more so than any other element. Potassium is necessary not only for growth, but it also *enhances the burning quality of the tobacco*.

A standard **12-6-6** (*nitrogen, phosphorus, potassium ratios*) fertilizer is usually what is used in commercial tobacco management with adjustments added or subtracted according to the soil test results.

Joyce Moore

Over thirty varities of tobacco seeds available for the home gardener http://www.virtualseeds.com/tobacco.html

Starting Seeds Successfully http://virtualseeds.com/startingSeeds.pdf

Internet urls on tobacco growning for home gardeners and commercial applications

Home tobacco growing guide from University of Florida Extension: <u>http://edis.ifas.ufl.edu/AA260</u>

Commercial Burley Tobacco Production Guide from Virginia Cooperative Extension

http://www.ext.vt.edu/pubs/tobacco/436-050/436-050.html

An informative E-book on all stages of home tobacco growing: "Grow, Roll, Smoke: **Proven techniques from growing to drying and curing** (\$25.37) Instant download: http://virtual12.grsmoke.hop.clickbank.net/?tid=5766QB94

Definitions you may find helpful

Air-cure tobacco by hanging the leaves in a ventilated barn until they have no sugar remaining. Fire-cure tobacco by setting it out on racks over a wood-fueled fire. This method is used mostly for pipe blend tobacco because the type of wood used for the fire influences the flavor. Flue-cure tobacco by hanging it in a closed barn. Pipes from radiators or some other source supply controlled heat to the leaves until the starch is converted to sugar and the leaves turn yellow-orange. Sun-cure tobacco by setting it on racks in the sun for between 12 and 30 days. This method is similar to flue-curing and will produce a sweeter tobacco. (Source: ehow.com)