

Sunn hemp is a tropical legume that is being widely used in the Southern region. It grows quickly and can fix substantial amounts of nitrogen. There are reports that some varieties are poor hosts for root knot, soybean cyst, reniform as well as other plant parasitic nematodes. Sunn hemp can be grazed or mowed at about 1-foot and it will regrow.

Recommended Varieties

Variety	Reasons Why	Source
AU Golden	Lower dry matter production, grows to about 5 feet and blooms.	Jimmy Carter Plant Materials Centers data
Tropic Sun	Extremely high dry matter production, can grow to 10 feet. Plants are woody when allowed to get that mature. Low alkaloid levels, suitable for grazing.	Jimmy Carter Plant Materials Center data, Managing Cover Crops Profitably
Common sunn hemp	High biomass production, can grow to 8 feet. Can set fertile seed if allowed to grow long enough. A termination plan is needed.	Jimmy Carter Plant Materials Center data

Planting Information

Information	Comments	Source
Drilled Seed Depth (inches)	½ - 1	Southern SARE Oklahoma Fact Sheet
Drilled Seeding Rate (lbs/acre)	20 - 40 Use <i>Bradyrhizobium</i> spp. inoculant. Higher seeding rate tends to keep stem size smaller and produces less branching.	ARS Fact Sheet
Broadcast Seeding Rate (lbs/acre)	Increase drilled rate by 25 %	Southern SARE Oklahoma Fact Sheet
Aerial Seeding Rate (lbs/acre)	Not recommended.	

Termination Information

Information	Source
Sunn hemp can be terminated by mowing, rolling/crimping at bloom, herbicides and tillage. Herbicides are more easily used on shorter stands. Terminate by close mowing if 1 ft tall or shorter. Termination of large stands can be difficult. Roller crimping can terminate stands before stems become woody. Large stands can be sprayed and then rolled if sprayer is tall enough, otherwise roll and then spray. Controlled grazing or a combination of methods may also be used.	Southern SARE Oklahoma Fact Sheet, USDA Sunn Hemp Plant Guide; Clemson University
Consult your local Extension and state Pest Management Handbook for herbicide recommendations. Always follow the herbicide label.	

Continue to next page...

Cultural Traits

Traits		Comments	Source
Typical Dry Matter Range (lbs/acre)	5,000 – 8,000	High end of range is Tropic Sun.	Jimmy Carter Plant Materials Center data, Unpublished Literature Review in Piedmont – Gaskin
Typical Total N Range (lbs/acre)	100 - 200		Unpublished Literature Review in Piedmont – Gaskin
Life Cycle	Warm season annual legume		
Growth Habit	Upright		
Preferred Soil pH	6.0 – 7.0		USDA Sunn Hemp Plant Guide
Relative Costs (\$/acre)	\$\$\$\$		Based on survey of seed costs using maximum price and max seeding rate
Min. Germination Temp (F)	50° is min, 68° is ideal for best germination		Southern SARE Oklahoma & Florida Fact Sheets
Cautions	Can get very woody if left to get 7 to 8 foot tall. Nitrogen in the woody, high lignin biomass is very slow to be released after short burst from leaves. Very high biomass can impede planting of next sequential crop. Consider terminating several weeks prior to next crop establishment or mowing to reduce residue size. Can be susceptible to Fusarium wilt and anthracnose as well as pests such as sunn hemp moth, pod borers, and stink bugs. Rotate fields every three years to avoid pest and diseases. Seed is toxic to both game and domestic bird species if consumed in large amounts. Can be a minor host of Sclerotinia and Sclerotium rolfsii (<i>Athelia rolfsii</i>), do not plant before legume cash crops or hemp unless fumigating before planting cash crop.		Clemson University

Continue to next page...



Sources:

ARS Fact Sheet:

<https://iapreview.ars.usda.gov/SP2UserFiles/Place/60100500/FactSheets/FS04h.pdf>

Jimmy Carter Plant Materials Center Annual Reports:

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ga/plantsanimals/?cid=nrcs144p2_022076

Managing Cover Crops Profitably: <https://www.sare.org/Learning-Center/Books>

Southern SARE Oklahoma Fact Sheet:

<https://www.southernsare.org/Educational-Resources/SARE-Project-Products/Fact-Sheets/Using-Sunn-Hemp-as-a-Cover-Crop-in-Oklahoma>

University of Florida Fact Sheets:

<http://edis.ifas.ufl.edu/tr003>

<http://edis.ifas.ufl.edu/ng043>

USDA Sunn Hemp Plant Guide:

https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/njpmcpg11706.pdf