

## in Sweetpotatoes

North Carolina is the number one producer of sweetpotatoes in the United States. The crop originated in either Central or South

America and was later introduced to the southeastern United States and grown by Native Americans.

## Sweetpotato is **NOT** a typo

Using the single-word term helps differentiate the sweetpotato from the white or Irish potato, which is a tuber, not a root, and which possess a different nutrient profile. Sweetpotato—ipomoea batatas—a storage root, is part of the morning glory family.

## Yams v. Sweetpotatoes



Yam

- Tuber
- Native to Africa
- Cream-colored flesh
- Rough, scaly exterior



- Vegetables
- Used in traditional casserole prep
- Appear on can labels



### Sweetpotato

- Root
- Native to Americas
- Flesh comes in many colors
- Smooth exterior

## One **BILLION** pounds

North Carolina has produced over one billion pounds of sweetpotatoes each year for the last seven years, making it the only state to reach the billion pound mark.

North Carolina had the largest revenue increase in 2017 at just over

\$37 MILLION

How many days ▷▷▷▷ after transplanting are sweetpotatoes harvested?

90-120 **DAYS** 

4-5



Roots on a mature sweetpotato hill

## Just the facts ma'am...

- The sweetpotato is North Carolina's state vegetable.
- North Carolina sweetpotatoes are available every month of the year.
- The temperate climate and soil types found across North Carolina are the best growing conditions for sweetpotatoes.
- There are hundreds of varieties of sweetpotatoes and many are grown across North Carolina. Some you may see most often in grocery stores are the Japanese sweetpotato, the white sweetpotato and the orange Covington sweetpotato.

## Learn more about a North Carolina Sweetpotato Farm!

Kornegay Family Farms, located in Johnston County, North Carolina, is a fourth generation family farm.

Click or scan for the video.





## Many Thanks!

A big thank you to Erica Edwards, Ed.D for her efforts in assembling the content and Heather Barnes, NCDA&CS Marketing Specialist, for her contributions necessary to produce this publication.

**THANK YOU!** 

# **SWEETPOTATOES ACROSS THE STATE** Sweetpotatoes are grown in many counties throughout the state including the counties shown here. North Carolina markets sweetpotatoes to many countries around the world including Canada, the Netherlands, the United Kingdom,

## A Year in the Life of a Sweetpotato

Germany and many more!



weetpotatoes are native to NC and grow mostly in the coastal plain region. NC grows more of this low calorie vegetable than any other state.



Sweetpotatoes are not started from seed but are grown from cuttings called sprouts or slips. Some farmers start sprouts in



Other farmers grow sprouts by "bedding" seed potatoes in March. The whole root is placed on top of the ground and covered with a thin layer of soil and plastic.

## **VOCABULARY**

**Agriculture** – science of cultivating soil, producing crops and raising livestock; includes preparation and marketing of resulting products.

**Curing** – process that converts some starches in the sweetpotato to sugar, making the flesh taste sweeter, improving flavor and storage life of sweetpotatoes.

**Greenhouse** - structure with glass or plastic walls and roof used for growing plants

**Harvest** – to gather a crop when it has reached maturity

**Root** – plant part that grows underground, absorbing water and nutrients

**Soil** - upper layer of earth in which plants grow that may be dug or plowed

**Sprout** – new growth

**Storage Root** – enlarged root that stores large amounts of starch and carbohydrates

**Transplant** – move a plant from one place to another

**Tuber** – a short, thickened fleshy part of an underground stem serving as a food.



Sprouts will be cut and transplanted from the greenhouse or bedding field to a different field in May and June.



Sprouts are planted in rows using a machine. The sweetpotatoes we eat will grow in this field. It takes 90-120 days without frost to grow a sweetpotato.

## Not only good, they're good for you!

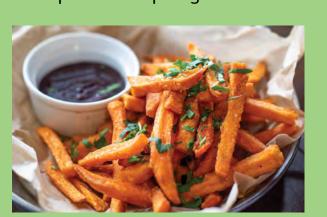
## Each 1 cup, cooked serving has

4 grams of protein | 180 calories | 41.4 carbs | 6.6 grams of fiber

## % Daily value

Iron 7.6% Potassium 27% Vitamin C 65.33%

Vitamin A 768.7%





Sweetpotatoes grow under the ground and are the storage root of the plant.



Sweetpotatoes are ready to dig 90-120 days after sprouts are transplanted. Starting in August rows are plowed and sweetpotatoes are flipped on the top of



Most sweetpotatoes are cured. Curing changes starches in the sweetpotatoes into sugar, making it sweeter and the skin tougher. It takes 4-7 days of 80-85°F temperature and 80–90% relative humidity to cure sweetpotatoes.



Sweetpotatoes are graded or sorted according to their size by the worker in the field, or by machine before being packed. The largest sweetpotatoes are jumbos and the smallest are canners.



After being cured, sweetpotatoes are stored in their boxes at temperatures between 55-60°F and 85% relative humidity. This special storage process is why NC sweetpotatoes are available 365 days a year.



Sweetpotatoes have a thin skin which can

be easily hurt. Those washed and sold

right after digging are called "green."

Sweetpotatoes are washed, sorted by size and packed before going to market.



NC farmers sell sweetpotatoes all over the world. You can find our state vegetable in many sections of the grocery store.

## Click or scan to learn more about growing sweetpotatoes.





Make a yummy sweetpotato smoothie!





Grow your own sweetpotato!

Click or scan for these activities and more!



## **SWEETPOTATO PLANTS**

#### Have Leaves **Flowers** Stems **Flowers** Fibrous roots Storage roots we eat Need Leaves Soil Water Nutrients Sunlight Stem Are Harvested Transplanted A living thing Fibrous roots A flowering plant Storage root Grown for eating Available year-round

## Career Corner



#### Jim Jones

Sweetpotato farmer

## How did you get started growing sweetpotatoes?

I grew up on a farm helping my Granddad. I planted my first sweetpotatoes when I was 15. I wanted to have them to sell in the fall with my Granddad's pumpkins.

#### What do you do in your job?

A farmer must be a jack of all trades. Work on tractors and equipment, greenhouse building, storage building, irrigation, field and labor management are part of the job, along with fertilizer and chemical applications. I also do sales and purchases.

#### What do you love most about your job?

The mystery of growing a crop under the soil, not knowing how it will yield or what the shapes of the sweetpotato will be until harvest time.

## What would you tell someone who is first learning about your job?

My job requires a lot of dedication, but it is worth it to me to be my own boss and have my family working with me.



#### **Anders Huseth**

NCSU entomologist, NC State University

#### What do you do in your job?

As an extension scientist, I study insect pests of vegetables and field crops (sweetpotatoes, corn, cotton, soybeans). My group and I study the relationships between insects and their surrounding habitat. We combine field observations and satellite data to analyze what types of habitats favor specific insect species that damage crops. To do this, we count insects in farmer's fields and relate those to the crop production patterns that the satellite observes from space. We use mathematics and statistics to predict when and where insect pests will be a problem, helping farmers understand risk for crop damage.

#### What do you love most about your job?

I love working with different scientists to solve real world problems impacting North Carolina farmers. We use different approaches to understand how problems develop and what farmers can do to solve these issues. A large part of this job includes communication with a diverse group of stakeholders, including farmers and the public. Visiting people on their farms to communicate research results impacting their production is one of the greatest rewards of my job.



## Thomas M. Batts

Commercial Horticulture Agent, Wilson County, NC Cooperative Extension

#### What do you do in your job?

I work with sweetpotato growers to help them grow their crop. I get to visit and help farmers on a daily basis by answering their questions about many different things about sweetpotato production. I help them make informed decisions based on latest knowledge and information available from NC State and NC A&T universities.

#### What do you love most about your job?

I love helping our growers provide food to feed not only themselves, but the world. I love getting to know each and every grower that I meet. I also enjoy solving grower's problems and helping them fix those problems.

### How does your job impact agriculture?

My job directly impacts agriculture because without us, growers could not make the best decisions based on current research. Without Cooperative Extension, growers might not be able to diagnose a problem that could wipe out an entire crop. We also serve as a sounding board for grower ideas and give our opinions on those ideas.

#### This Ag Mag complements and connects to the following North Carolina Standard Course of Study:

English/Language Arts | 3rd Grade RL.3.1, RL.3.7, Rl.3.1, Rl.3.4, Rl.3.5, Rl.3.7 | 4th Grade Rl.4.1, W.4.1, W.4.6, W.4.7 | 5th Grade W.5.1, W.5.3, W.5.6 Math | 3rd Grade 3.OA.1, 3.OA.3, 3.MD.2, 3.MD.3 | 4th Grade 4.OA.1, 4.OA.2

Science | 3rd Grade 3.L.2, 3.L.2.1, 3.L.2.2, 3.L.3.3, 3.L.2.4 | 4th Grade 4.L.2, 4.L.2.1, 4.L.2.2 | 5th Grade 5.L.2, 5.L.2.1, 5.L.3., 5.L.3.1, 5.L.3.2

Social Studies | 3rd Grade 3.E.1, 3.E.2, 3.C&G.2 | 4th Grade 4.H.2, 4.H.2.2, 4.G.1, 4.E.1 | 5th Grade 5.G.1, 5.E.1 | 6th Grade 6.H.1.1, 6.H.2.2, 6.H.2.3, 6.H.2.4, 6.G.1.4

7th Grade 7.H.1.1, 7.H.1.3, 7.G.1.1, 7.G.1.2, 7.G.2.2, 7.C.1.1 | 8th Grade 8.H.3.2, 8.H.3.3, 8.H.3.4, 8.G.1.1, 8.G.1.2, 8.C.1.2, 8.C.1.3

Health | 3rd Grade 3.NPA.1.2, 3.NPA.2.1 | 4th Grade 4.PCH.3, 4. NPA.1.1, 4.NPA.1.3 | 5th Grade 5.NPA.1.1

### Our mission statements:

The **North Carolina SweetPotato Commission Inc.** is a nonprofit corporation made up of over 400 sweetpotato growers along with the packers, processors and business associates that support them. The sole purpose of the commission is to increase sweetpotato consumption through education, promotional activities, research and honorable horticultural practices among its producers. Thanks to the six sweetpotato farmers that chartered the commission in 1961, the commission has supported its growers and maintained North Carolina as the No. 1 sweetpotato producing state in the United States since 1971.

Ag in the Classroom (AITC) is a unique educational program affiliated with North Carolina Farm Bureau (NCFB) with a mission to promote the importance of agriculture to all Pre-K through 12th grade public and private school teachers and students. Its inception occurred in 1985 by the approval of the NCFB Board of Directors. The educational program is dedicated to fostering an understanding of the importance of agriculture in North Carolina. Agriculture continues to be the number one industry in North Carolina. AITC enables teachers to meet the educational needs of their students through: North Carolina Standard Course of Study-based curricula, workshops for in-service and pre-service teachers, grants, ag literacy books, and county Farm Bureau support.

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To learn more about Sweetpotatoes or order more copies of this Ag Mag, visit **ncsweetpotatoes.com**.

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