

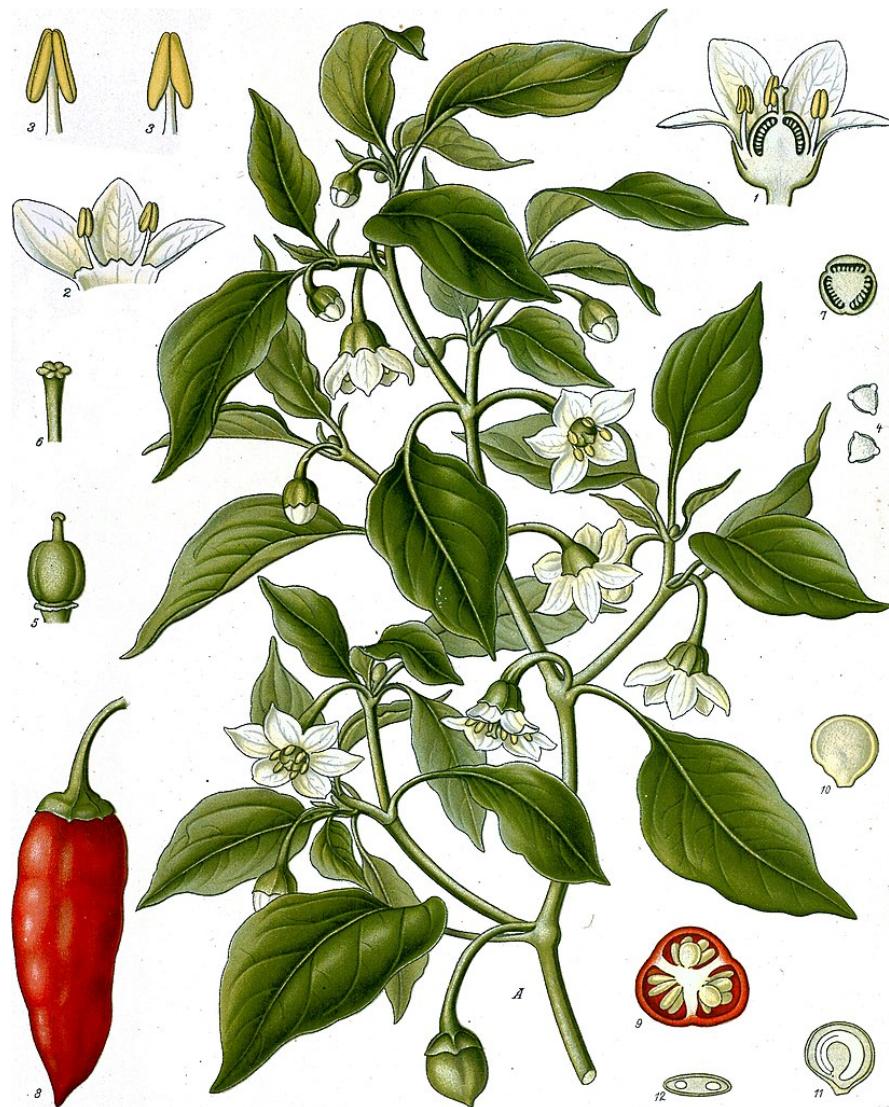
INTERESTING FACTS ABOUT CHILI PEPPER

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APRIL 15, 2023

Speaker notes

- Natural history of chili pepper
- Human interactions with chili pepper
- Nonfood uses of chili pepper
- References

Natural history of chili pepper



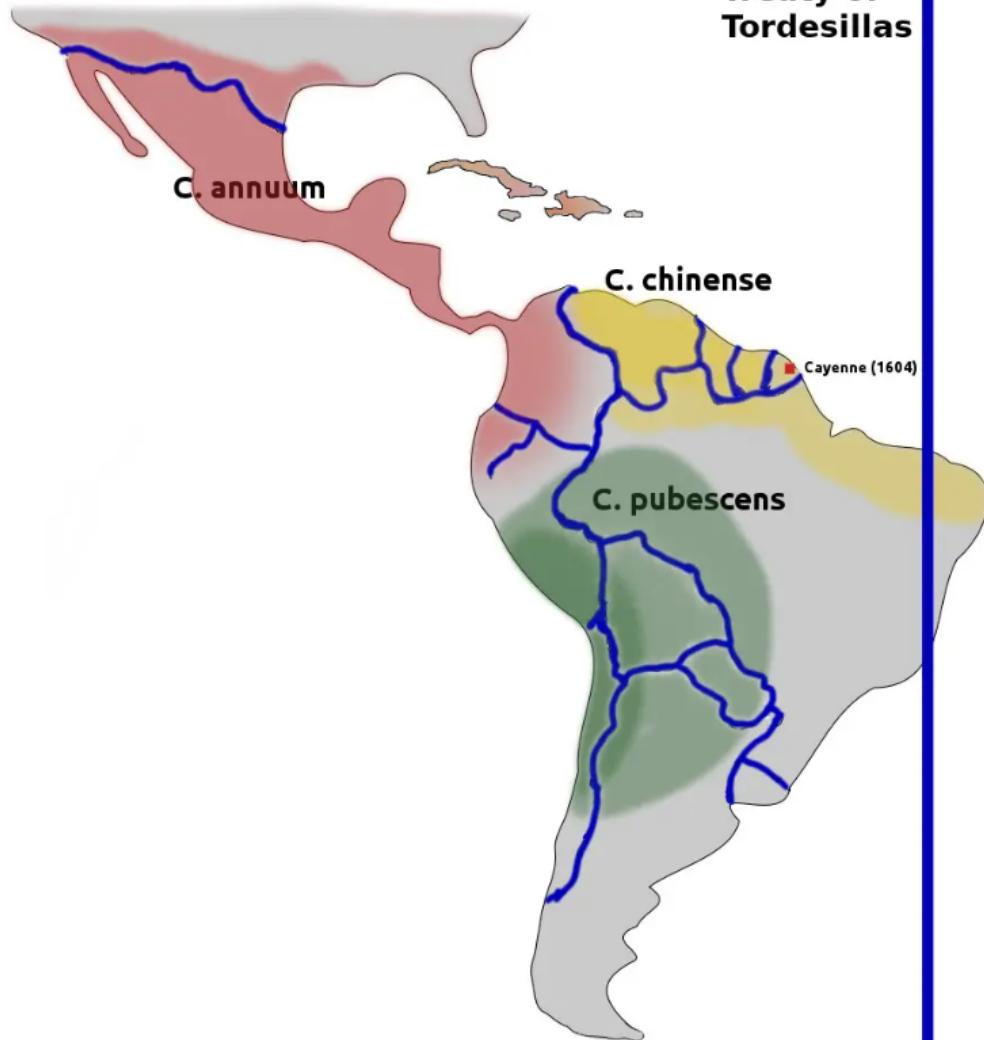
Speaker notes

Like many other plants, peppers use animals to solve transportation problems including seed dispersal. Pepper fruits "want to be eaten by animals" so that seeds will be widely dispersed. They even advertise their availability by turning red when ripe.

Birds are great dispersers for pepper seeds because they are swallowed whole. However, when mammals eat peppers, most of the seeds are crushed to death by molar teeth.

Through evolution pepper plants solved this problem by putting capsaicin in their fruits. Capsaicin is a powerful repellent for mammals. But birds do not have neural receptors to detect this chemical.

Treaty of
Tordesillas



America Chilis distribution before 1492

Speaker notes

Chili pepper plants belong to the genus Capsicum which is native to the Americas. The first indigenous people harvested wild fruit and started cultivation about 8,000 years ago.

This map shows the range of Capsicum when Columbus arrived in 1492.

Columbus returned to Europe with Capsicum seeds. The original varieties were far too hot for the European palate, but plant breeding successfully resulted in reducing capsaicin content. An extreme example is the bell pepper variety which contains very little capsaicin.

It is believed that Capsicum was spread to Asia by Portuguese and Spanish traders following Magellan's circumnavigation of the earth in 1519-1522.

Chili pepper quickly became an essential ingredient in the cuisine of many countries including Italy, Thailand, and China.

Plant breeding has resulted in a huge range of varieties with varying hotness.

The chart displays a list of pepper varieties along with their Scoville Heat Units (SHU) and corresponding heat rating symbols. The heat rating is indicated by a series of small red fire icons, where each icon represents approximately 100,000 SHU. The varieties are listed from highest to lowest heat content.

Scoville Heat Units	Heat Rating	Pepper Varieties
15-16,000,000	██████████	Pure Capsaicin
2-5,300,000	██████████	Standard U.S Grade Pepper Spray
2,200,000	██████████	Carolina Reaper
2,009,231	██████████	Trinidad Moruga Scorpion
1,463,700	██████████	Trinidad Scorpion Butch T
800,000-1,001,300	██████████	Bhut Jolokia or "Ghost Pepper"
350,000-575,000	██████████	Red Habanero
250,000-400,000	██████████	White Bullet Habanero
150,000-325,000	██████████	Orange Habanero
100,000-300,000	██████████	Datil
50,000-100,000	██████████	Thai
15,000-50,000	██████████	Pencil Hot
12,000-30,000	██████████	Manzano
8,000-22,000	██████████	Serrano
5,000-15,000	██████████	Hungarian Wax Pepper
5,000-15,000	██████████	Caribe
2,500-10,000	██████████	Red Fresno
2,500-8,000	██████████	Jalapeno
2,500-5,000	██████████	Cherry Bomb
1,000-5,000	██████████	Hatch Chile
500-2,500	██████	Anaheim
500-2,000	██████	Padron
1,000-2,000	██████	Poblano
500-1,000	██████	Santa Fe
100-1,000	████	Italian Long Hot
100-1,000	████	Shishito
100-500	██	Pepperoncini
0-1,000	█	Cubanelle
0 (NO HEAT)	X	Gypsy Pepper
0 (NO HEAT)	X	Bell Pepper

Speaker notes

Plant breeding has resulted in a huge range of varieties with varying hotness.



Speaker notes

Tabasco



Speaker notes

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Speaker notes

"On average, each Chamorro consumes 4 ounces of Tabasco each year, which is more per capita than any other country! The mainland United States is a far-flung second place, with less than one ounce consumed per year by each American." Craig Santos Perez, "Ode to Tabasco", the Lifted Brow Blog, Jan. 24, 2018.



Guam still has world's highest Tabasco consumption rate

by Jolene Toves

Guam - The results are in and Guam still maintains its number one spot in Tabasco consumption per capita. That unique tidbit was released today from a recent conference hosted by Tabasco in Thailand. The spicy sauce is sold in over 165 countries and territories worldwide. Coming in a distant second was the U.S. Tabasco is distributed in Guam by Market Wholesale Distributors Inc.

Speaker notes

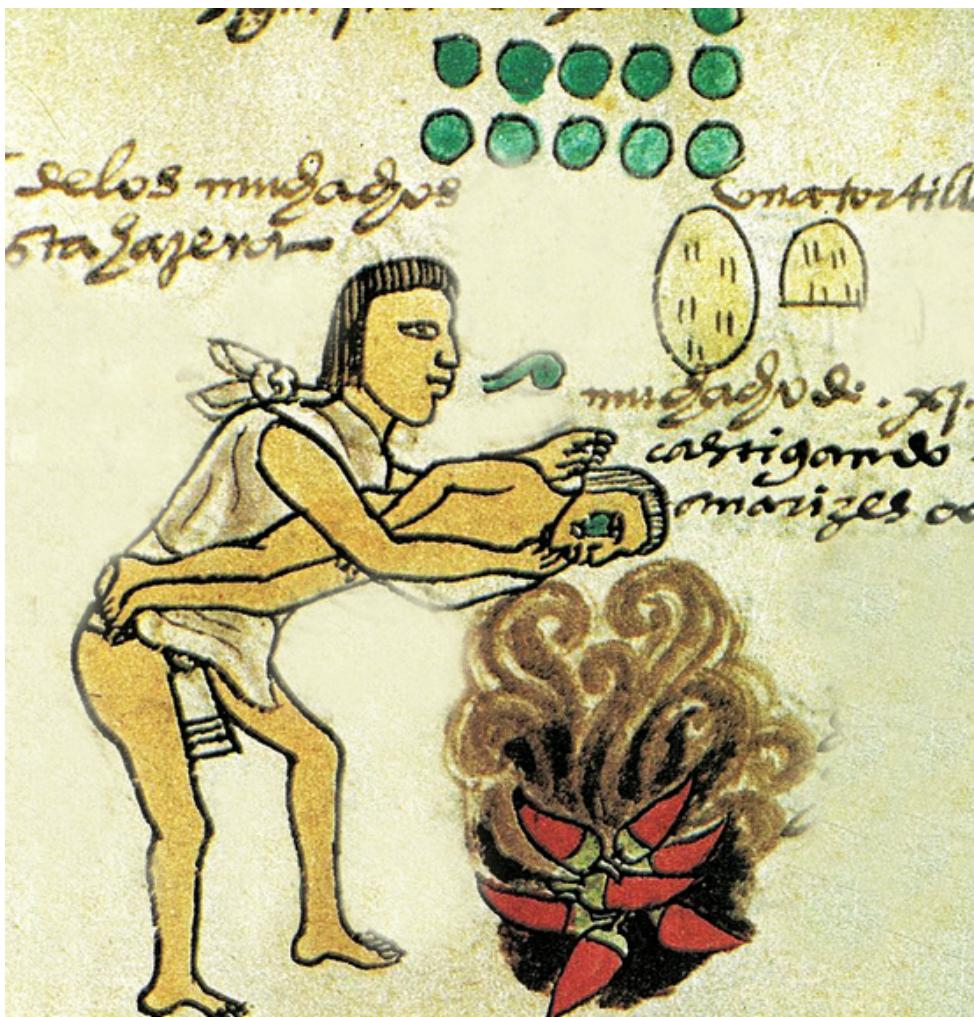
USE AS A PESTICIDE



Speaker notes

Notes go here.

USE AS A NONLETHAL WEAPON



Speaker notes

Notes go here.

MEDICAL USES



w Walgreens · In stock

Walgreens Capsaicin Arthritis P...



a Amazon.com

Rugby Capsaicin 0.025% ...



CVS

CVS Health Arthritis Pain...



Target

Capzasin-hp Arthritis Pain Reli...



a Amazon.com

Capzasin-HP Arthritis Relief Topical ...



eBay

6 X Capsaicin Hot Chilli Gel Cream ...



WebMD

Capsaicin Topical: Uses, Side Effects ...

Speaker notes

Capsaicin is used to help relieve a certain type of pain known as neuralgia (shooting or burning pain in the nerves). Capsaicin is also used to help relieve minor pain associated with rheumatoid arthritis or muscle sprains and strains. Qutenza® patch is also used to treat nerve pain caused by diabetic peripheral neuropathy of the feet. It will not cure any of these conditions. Neuralgia is a pain that comes from the nerves near the surface of your skin. This pain may occur after an infection with herpes zoster (shingles or postherpetic neuralgia). Capsaicin will help relieve the pain of postherpetic neuralgia, but it will not cure the condition. Qutenza® is to be given only by your doctor. Zostrix® is available both over-the-counter (OTC) and with your doctor's prescription. This product is available in the following dosage forms: Cream Lotion Patch, Extended Release Solution

MEDICAL USES



Walgreens - In stock
Walgreens Capsaicin Hot ...



Amazon.com
Bulk Case of 6 Caps...



Meijer
Meijer Capsaicin Heat Pat...



DailyMed
CAPSAICIN HEAT PATCH BACK AND LA...



Walmart.com
Capsaicin Heat Patch...



Amazon.com
Veridian Healthcare...



Walmart - In stock
Equate Capsaicin Pai...



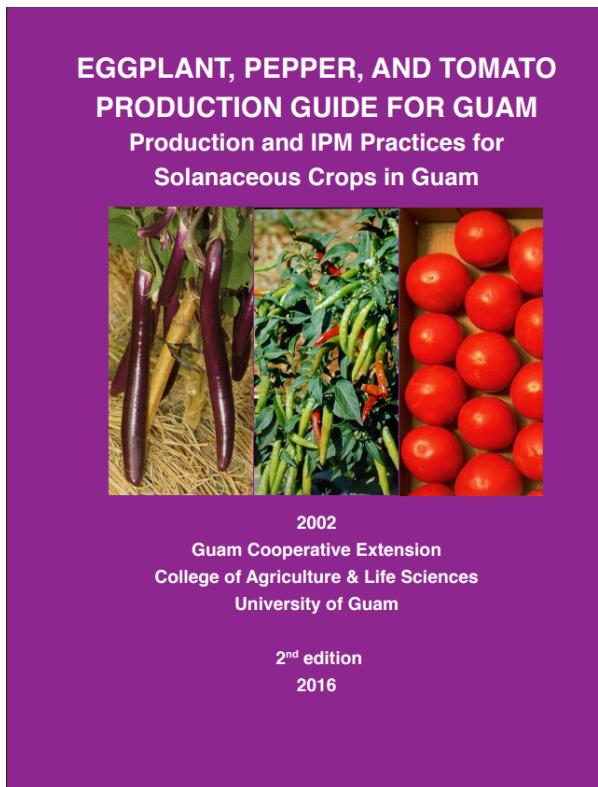
H-E-B
Salonpas Hot Capsic...



Walmart - Out of stock
Equate Capsaicin Pain R...

Speaker notes

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2017. Hot Pepper (*Capsicum* spp.) - Important Crop on
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University of Guam College of Natural and Applied
Sciences, 7p.

