## Pumpkin Spring Rolls
(Source: Mga Lutuing Katutubong Gulay)

Ingredients

4 cloves garlic
1 medium size onion, minced
1/3 cup grind pork meat
1/4 kg pumpkin, cut in thin strips
1/2 tsp salt
1/4 tsp black pepper
4 pcs oregano leaves
20 pcs egg roll wrappers
cooking oil

Procedure

- Sauté the garlic and onion together with pork and pumpkin.
- Add salt and black pepper.
- For extra taste, add the oregano leaves
- Collect and let it cool in a medium container.
- Wrap in the egg roll wrapper the desired amount of cooked pork and pumpkin.
- Fry the pumpkin spring rolls until its crispy and wrapper is brown-red.
- Serve with vinegar as dip.

**Other ways of food preparation**

- Flowers, young stems, and young and ripe fruits are used as a vegetable.
- Young leaves and stems are cooked and used as a potherb, or added to soups and stews.
- Fresh flowers are dipped in batter and fried; immature fruits are sautéed, boiled, or lightly stir-fried; or chopped and eaten raw as a salad (in the United States).
- Fruits are blanched, steamed or fried as a vegetable, or added to soups (in Southeast Asia).
- Fruits are made into desserts such as custards, pudding, and sweet pastes.
- Fruits are combined with coconut milk, or steamed and mixed with grated coconut and sugar.
- Fruits are steamed and mixed with cassava flour to make crisps.
- Fruits are dried and ground into powder as ingredient in bread making.
- Seeds are eaten raw or cooked. Seeds are roasted or toasted and ground as added ingredients for stews.
- Seeds are dried and eaten as a crunchy snack food.

AVRDC
The World Vegetable Center
ADB Asian Development Bank
Republic of the Philippines
Department of Agriculture
BUREAU OF AGRICULTURAL RESEARCH
SANREM CRSP



# Know Your IVs

# Squash

## Introduction

Squash or *Cucurbita moschata* is an easy to grow, warm season crop that can be harvested about two months after planting. In Southeast Asia, it is grown mainly for the local markets, and is mostly found in home gardens, or in mixed cropping together with maize and other field crops. Squash can also be found in commercial plantations, where it is cultivated as a monocrop.

## Local Name

English — *squash, pumpkin, gourd*
Bangladesh — *sweetgourd*
Cambodia — *lo-pëu*
Indonesia — *waluh, labu, labu merah*
Laos — *f'ak kh'am, f'ak th'oong, 'ü'*
Malaysia — *labu merah, labu parang*
Philippines — *kalabasa*
Thailand — *fak-thong, namtao farang*
Vietnam — *b[is] d[or], b[is] ng[oo]*

## Biodiversity

Squash is believed to have originated in Central Mexico, and has been in cultivation since 8000 BC. Archaeological records indicated its presence in northwestern Mexico from 4900 to 3500 BC, and in northern Belize, Guatemala, and Peru from 3000 to 2000 BC. It spread to North and South America, and was introduced to Asia, where secondary centers of diversity developed.

- Squash is a herbaceous annual or perennial creeping vine that can reach up to 9 m.
- It has hard, angular stems with large, hairy, mottled, grayish green, and shallowly lobed leaves.
- Flowers are showy, bell-shaped, and lemon yellow to deep orange in color.
- Fruits come in various shapes, sizes, and colors, but are often large, mottled green to cream, round to angular, with thick cork.
- Fruits usually weigh between 2.2-5.4 kg.
- Seeds are numerous, white to dark colored, and flattened.
- Squash fruits are firm and meaty, and are said to have a delicious flavor when baked, much like that of a sweet potato.
- Seeds have a nutty flavor.

## Nutritional value

Squash is a good source of vitamin A. Table below shows nutritional value per 100 g edible portion.

| Nutrition Value (per 100 g edible portion) | |
|---|---|
| Water | 85-91 g |
| Protein | 0.8-2.0 g |
| Fat | 0.1-0.5 g |
| Carbohydrates | 3.3-11.0 g |
| Mg | 16-34 mg |
| Ash | 0.6 g |
| Ca | 14-48 mg |
| P | 21-38 mg |
| Fe | 70 mg |
| Vit A. | 340-7800 IU |
| Vit B1 | 0.07-0.14 mg |
| Vit C. | 6-21 mg |
| Energy Value | 85-170 kJ/100 g |
| Antioxidant of fruit (by ABTSM) water | 5 µm/g (Very low) |
| Antioxidant of shoot (by ABTSM) water | 79 µm/g (Very low) |

## Cultivation

- Prepare furrows 15 cm deep.
- Plant by direct seeding or transplanting.
- When sowing for transplanting use individual containers for seed. Be careful not to remove soil from around the roots during transplanting.
- Suggested spacing: vary from 60-120 cm apart between plants in rows 90-120 cm apart.

## Utilization

Aside from its use as food, squash can also be utilized in other ways.

- Ripe fruits are used as fodder.
- Seeds yield a valuable vegetable oil.
- Squash is known to have medicinal properties.
- Tea from the leaves is used for the treatment of stomach inflammation and jaundice (in Surinam).
- Flowers are found effective against jaundice.
- Seeds used to treat fever and kidney stones, and to expel parasitic intestinal worms.
- Boiled roots are said to stimulate breast milk production in nursing mothers.

### References


AVRDC Vegetable Genetic Resources Information System (AVGRIS). 2005. AVRDC-The World Vegetable Center, Shanhua, Tainan,Taiwan.Website: <http://203.64.245.173/avgris/>

Christman, S. "*Cucurbita* spp." Floridata. 27 October 2003. Floridata.com L.C. 12 November 2004 <http://www.floridata. com/ref/C/cucu_spp. cfm>

"*Cucurbita moschata*." Plants for a Future-Species Database. 20 October 2002. Plants for a Future. 12 November 2004 <http://www. scs.leeds.ac.uk/cgi-bin/pfaf/arr_html?Cucurbita +moschata>

"*Cucurbita moschata*-Calabaza." Tropilab. Tropilab Inc. 12 November 2004 <http://www.tropilab.com/cucur-max. html>

Facciola, S. 1990. Cornucopia, A Source Book of Edible Plants.

Hernándo Bermejo, J.E. and J. León (eds.). 1995. Neglected Crops: 1492 from a Different Perspective. 1994. Plant Production and Protection Series No. 26. FAO, Rome, Italy. p. 63-77.

Indigenous Vegetables of Southeast Asia. AVRDC— The World Vegetables Center. http://203.64.245.173/iv_sea/

PCARRD. 2007. Mga Lutuing Katutubong Gulay.

Siemonsma, J.S. and Kasem Piluek (eds.). 1993. PROSEA 8: Vegetables. The Netherlands: Pudoc, Wageningen. 1994. 412 p.

Stephens, J.M. "Calabaza-*Cucurbita moschata* Duch. Ex Lam." Electronic Data Information Source. April 1994. University of Florida. 12 November 2004 <http://edis.ifas.ufl.edu/BODY_MV039>