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GABI and YAUTIA: Their classification and description

Jose R. Pardales, Jr.
Subject Matter Specialist

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GABI

CLASSIFICATION

Family	: Araceae (Aroid)
Genus	: Colocasia
Species	: esculenta
Scientific name	: **Colocasia esculenta** (L.) Schott.

COMMON NAME : Taro
LOCAL NAMES : Gabi (Tagalog, Waray, Bisaya) Gaway (Waray), Gablos, Abalong

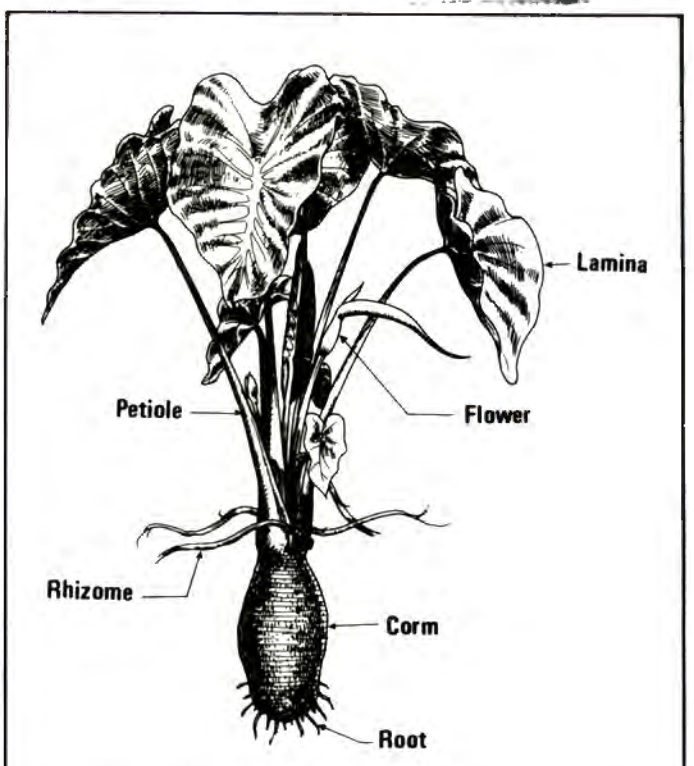

Fig. 1. An entire plant of gabi showing its primary parts

DESCRIPTION

Leaves and petioles

Gabi is an herbaceous plant consisting of a central corm from which cormels, roots and shoots arise. The shoot consists mainly of the leaves which arise in a whorl ending in a terminal bud at the apex of the corm. The leaves are therefore the most prominent aerial organ of the plant. Each leaf consists of a long erect petiole and a large lamina. The attachment of the petiole to the leaf blade is at a point in the middle of the lamina. This form of attachment (peltate leaf) is a distinguishing feature which generally differentiates gabi from "gabing San Fernando" (**Xanthosoma sagittifolium**, yautia or "takudo") and the other members of the Aroid family like "galiang" and "palawan". The leaf lamina of gabi is large, entire and more or less rounded except for a slight indentation at the base and pointedness at the tip. Three main veins radiate from the point of attachment of the petiole and several prominent lateral veins originate from the main veins. The petiole is solid throughout its length and its base is flared out so that it clasps around the apex of the corm. The color of the petiole and the lamina varies in shade from green to purple depending upon the variety. There are many known varieties of gabi in the Philippines which differ distinctly from each other in morpohological trait or traits.

Corm and cormels

A gabi plant normally has a single corm which is a cylinderical or spherical structure representing the main stem. Petioles of existing leaves arise from the apex of the corm while the positions of previous leaves are marked by prominent rings or leaf scars. Lateral buds come out from the side of the corm. Within the brownish and relatively thick outer periderm of the corm lies the ground parenchyma which is densely packed with stored starch.

The cormels arise from the axillary buds present in the corm. Morphologically, they represent the lateral branches of the plant stem. The cormels may form adjacent to the corm or farther away depending on whether the variety is suckering or rhizomatous type. A suckering type gabi produces cormels that are very close to the corm, thus giving the impression that cormel gives rise to daughter plants around the main plant. On the other hand a rhizomatous gabi produces a number of rhizomes or runners with each terminal developing into a daughter plant located about 15 cm to 80 cm from the corm. Cormels which usually do not grow bigger than the corm develop likewise at the base of the daughter plants.

The root system of gabi is fibrous and generally originates from the basal end and the sides of the corm and cormels.

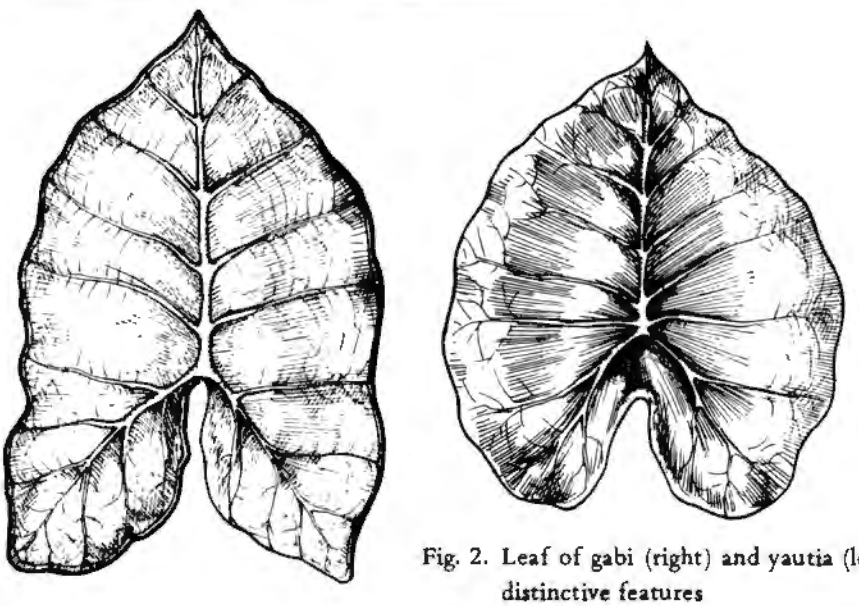

Fig. 2. Leaf of gabi (right) and yautia (left) showing their distinctive features

Flowers and fruits

Flowering in gabi generally is very occasional although some varieties are observed to flower readily. The flower of taro which arises from the leaf axils has two major components: the spadix and the spathe. The spadix which is 6-14 cm long is the central axis of the flower which contains the female and the male organs. The spathe on the other hand, is a large yellowish bract which sheaths and partly surrounds the spadix from the base.

Fruit and seed setting in gabi is even rarer than flowering. When fruiting occurs, the fruits are clustered at the basal portion of the spadix.

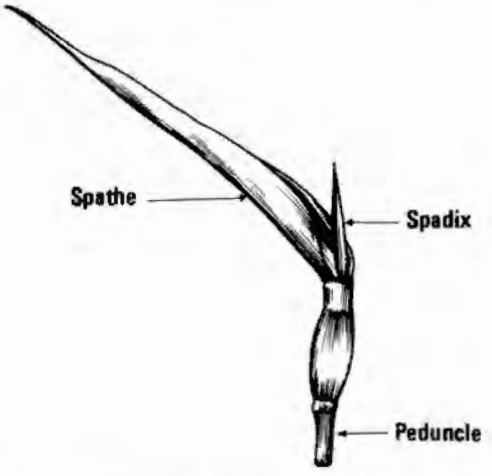

Fig. 3. Flower of gabi showing its main parts

YAUTIA

CLASSIFICATION

Family	: Araceae (Aroid)
Genus	: Xanthosoma
Species	: sagittifolium
Scientific name	: **Xanthosoma sagittifolium** (L.) Schott.

COMMON NAMES: Tannia, Yautia
LOCAL NAMES : Gabing San Fernando (Tagalog) Takudo (Bisaya, Cebuano) Butig (Waray)

DESCRIPTION

Leaves and petioles

Yautia resembles gabi very much in its general botanical characteristics. However, yautia is a more robust plant than gabi and it is generally adapted to upland areas while gabi is adapted to both upland and lowland conditions.

The leaf lamina of yautia is more or less heart-shaped with a deep indentation that divides the base of the lamina into two lobes. The petiole is attached to the lamina at the indentation. The leaf

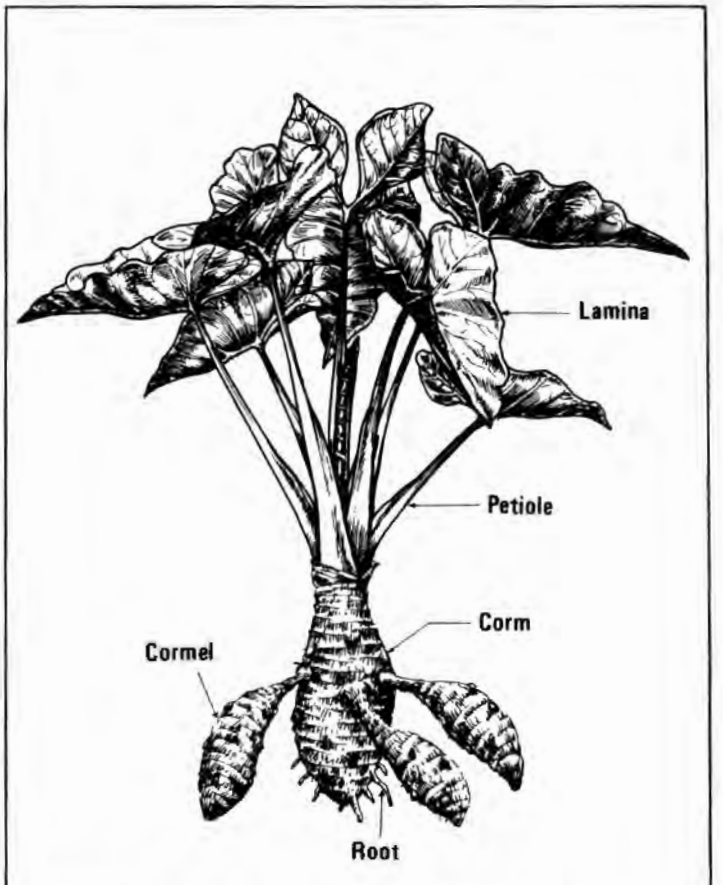

Fig. 4. An entire plant of yautia showing its primary parts

is therefore hastate which is in contrast to the peltate leaves of most gabi varieties. A thick midrib runs from the point of attachment of the petiole to the tip of the leaf while the two other prominent veins run to the basal lobes of the leaf. Also, there is a prominent vein which runs along the margin of the leaf of yautia. This marginal vein which is absent in gabi serves as a distinguishing feature for yautia. Like gabi, the petiole of yautia is solid with numerous air spaces and it is flattened at its attachment to the corm.

Corm and cormels

The corm of yautia is more or less spherical and the cormels which are flask-shaped are usually larger than those of gabi. Ten or more cormels may be produced on a corm. The root system of yautia, like that of gabi, is fibrous and superficial.

Flowers

Like gabi, the spadix type flower of yautia is rarely produced.

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PRIS STAFF

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Information Specialists – Mrs. Rebecca B. Napiere
– Mr. Perfecto U. Bartolini

Subject Matter Specialists
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