

## CORRESPONDENCE

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### USE OF COLOCASIA IN THE PHILIPPINES

TO THE EDITOR:

This replies to your recent letter, in which you first note that though Clark, working in Nigeria, discussed injurious effects of the use of *Xanthosoma atrovirens* as a staple in the dietary (*X. sagittifolium* and *Colocasia antiquorum* being also mentioned, though not as staples), later writers who have considered the matter in relation to leprosy have as a rule mentioned only *Colocasia antiquorum*, and in which you then ask for information regarding the species of this tuber (most widely known as "gabi") that are commonly used in the Philippines. The questions raised are dealt with seriatim.

(1) *Question:* What is (or are) the botanical species of the most commonly used gabi (wet cultivation)? *Answer:* The most commonly used gabi (wet cultivation) is *Colocasia esculentum* (Linn) Schott, Mellet. *Colocasia antiquorum* Schott has been reduced by Merrill as a synonym of *C. esculenta*. This vegetable is generally cultivated throughout the Philippines, about ninety-five varieties being recognized by the Filipinos. Local names are: Aba (Ilocano); Ana (Ilocano); Abalong (Bisaya); Amoang (Bontoc); Dagmai (Bisaya); Gabi (Tagalog); Kirapoi (Bisaya); Lagbai (Tagalog); Linsa (Bikolano); Lubiñgan (Ifugao); Natong (Bikolano); Pising (Bontoc).

(2) *Question:* Are species of the other genus mentioned also used here, and if so what are their distinguishing characteristics—from the practical point of view, not the technical botanical one? *Answer:* *Xanthosoma sagittifolium* is now grown in Los Baños, Laguna, and other localities like Cebu, and it is known in the Manila market as Cebu gabi. It is a native of tropical America, and is known as yautia. The rhizomes of yautia are much larger than those of gabi and when cooked are much more mealy than gabi, which has a tendency to be mucilaginous. Most people prefer the taste of yautia. No specimen of *X. atrovirens* is found in

our herbarium and there is doubt if it has been introduced into the Philippines.

(3) *Question*: Incidentally, what is the difference between the dry-culture gabi, as grown in the hill regions, and the common, wet-culture lowland one (or ones)? *Answer*: There is no difference between the dry-culture and wet-culture gabis. In dry-culture, gabi is cultivated for the roots, in wet-culture (irrigation) it is grown for the leaves; under the latter condition the plants are bigger, but the roots are not mealy as when grown in the uplands.

Search of the literature shows that among the constituents of gabi are hydrocyanic acid, which is reported to be found in the different parts of the plant, and calcium oxalate crystals. It is well known that hydrocyanic acid is poisonous and that calcium oxalate has irritating effects. However, when the plant is properly cooked as food, these harmful constituents are removed.

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