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## Allspice as Template for the Classic Maya K'an Sign

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During last year's field season in the Río Bravo conservation area in Northwestern Belize my workmen brought to my attention the cross-section of a freshly cut branch. The cuttings showed a yellowish cross with a smaller whitish cross inside and a small brown rhombus in the middle (Figure 1). The branch was cut from a tree in the afternoon of May 31, 2011 at the southern border of a large, previously unknown *aguada* approximately six kilometers east of La Milpa. After inquiring which tree the branch had been cut from, I was informed that it was pimento (Spanish *pimienta inglesa*, English allspice). This tree, *Pimenta dioica* (see Seaforth and Tikasingh 2005:72) emanates a strong cinnamon scent. I have seen many specimens over the years, but I have never paid attention to the cuttings before. My workmen also informed me that in earlier times the locals used to take the bark from this tree to manufacture strings which were used "to tie the thatches of their house."

### The K'an Cross

Looking at the cross in the tree branch I noticed a resemblance to the Maya K'AN cross. The K'AN logograph is common in Maya inscriptions and imagery, often used conspicuously as a decorative element on Late Classic Maya polychrome vessels (e.g., vessels K4945, K5179, K5459, K6943, K8804 in Justin Kerr's database at MayaVase.com) (Figure 2). K'an crosses are also depicted at San Bartolo, where they show up as part of a scaffold at the northern end of the West Wall (Figure 3). The scaffold is undoubtedly made from

the same kind of tree (thanks to Guido Krempel for bringing this mural to my attention). Furthermore, the K'AN sign is attested as a component of emblem glyphs (e.g., K'AN-na-WITZ-NAL *k'anwitznal* for Ucanal, or K'AN-tu-ma-ki *k'antumaak* for Caracol) as well as personal names (e.g., *Itzamk'anahk* "Precious Itzam Turtle"). Additionally, *k'an* serves as an adjective for a specific cacao additive, hitherto read as "yellow, ripe" cacao beverage (Kettunen and Helmke 2011:114).

Although *k'an* is not a word for allspice in any modern Mayan language—e.g., Ch'ol has *ichte'* "allspice" (Hopkins et al. 2011:61), Ch'orti' *akmiyan* "allspice" (Wisdom 1950:448), and Itzaj *naba'-ku'uk* "allspice seed" (Hofling 1994:461)—I



Figure 1. Cross-section through an allspice branch (photo: Estella Weiss-Krejci).



Figure 2. The K'an cross on Late Classic Maya ceramic vessels: (left) photograph K8804 © Justin Kerr; (center) photograph K5459 © Justin Kerr; (right) photograph K4945 (detail) © Justin Kerr.

suggest that the K'an cross depicts the cross-section of an allspice branch. This assumption is based on the strong resemblance between the cross in allspice cuttings and the K'an cross in Maya imagery.

### K'an as Allspice Ingredient

Since allspice is also a known ingredient for traditional Maya cacao (Green 2010:321), the K'an cross probably not only denominates the branch but also the leaves and fruits of the tree. The berry-sized fruits (Figure 4) are picked when green and unripe. After being dried in the sun they turn brown. When freshly ground they can constitute an aromatic ingredient in a variety of foods. The leaves can be made into a good tea which tastes a bit like cinnamon.

As a result of a discussion with Guido Krempel (personal communication 2011) I propose that several Classic Maya ceramics may have been containers for allspice-flavored cacao (see also Beliaev et al. 2010:260). Thus I suggest the following translation for the text on ceramic vessel K625 (Figure 5):

yu-k'i-bi ta-yu-ta K'AN-na ka-wa  
 y-uk'ib ta yuta(l) k'an ka(ka)w  
 "...the drinking cup/instrument for fruity  
 allspice-cacao?..."

### Other Applications of Allspice

The idea that the K'an cross signifies allspice is additionally supported by the aromatic scrolls (see Houston et al.

2006:148) on K5179 (Figure 6a) and the substitution of the K'an-cross with leaves on K1377 (Figure 6b) and La Florida Stela 9 (Figure 6c), here forming part of a gown. On K1645 one person wears a garment composed of similar leaves bound around the neck (Figure 6d). The scenes depicted on K1377 and K1645 have mortuary connotations. Allspice's pleasant fragrance and its anti-microbial properties were possibly the reasons why the ancient Maya used it when dealing with dead bodies. The mortuary application of allspice is also suggested by archaeological evidence. In Tomb 19 of Rio Azul allspice leaves had been placed over the corpse within the textile wrap around the body (Hall 1989:62).

Potential allspice leaves constitute the roof on K3844 (another mortuary scene) (Figure 7a) and form part of a jaguar *way's* house on K3038 (Figure 7b). The two other *wayoob* on K3038 facing the jaguar carry vessels which are marked with K'AN signs. The jaguar *way* seems to be vomiting. Could the vessels with the K'an sign contain a treatment? The medicinal properties of allspice are well known. A water extract of the berries is used to treat flatulence, vomiting, diarrhea, and other gastrointestinal problems (e.g., Seaforth and Tikasingh 2005:73).

### K'ante'

Whether a specific tree called *k'ante'* in the Maya inscriptions also denominates the allspice tree is a more complicated question. In the Popol Vuh Hunahpu and Xbalanque send their brothers One Batz and One





Figure 3. Scaffold accession scene at the northern end of San Bartolo Pinturas Sub-1A West Wall (rendering by Heather Hurst).

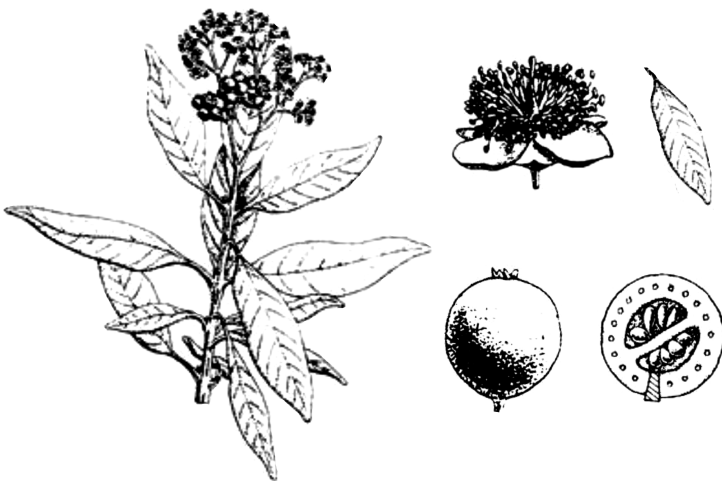
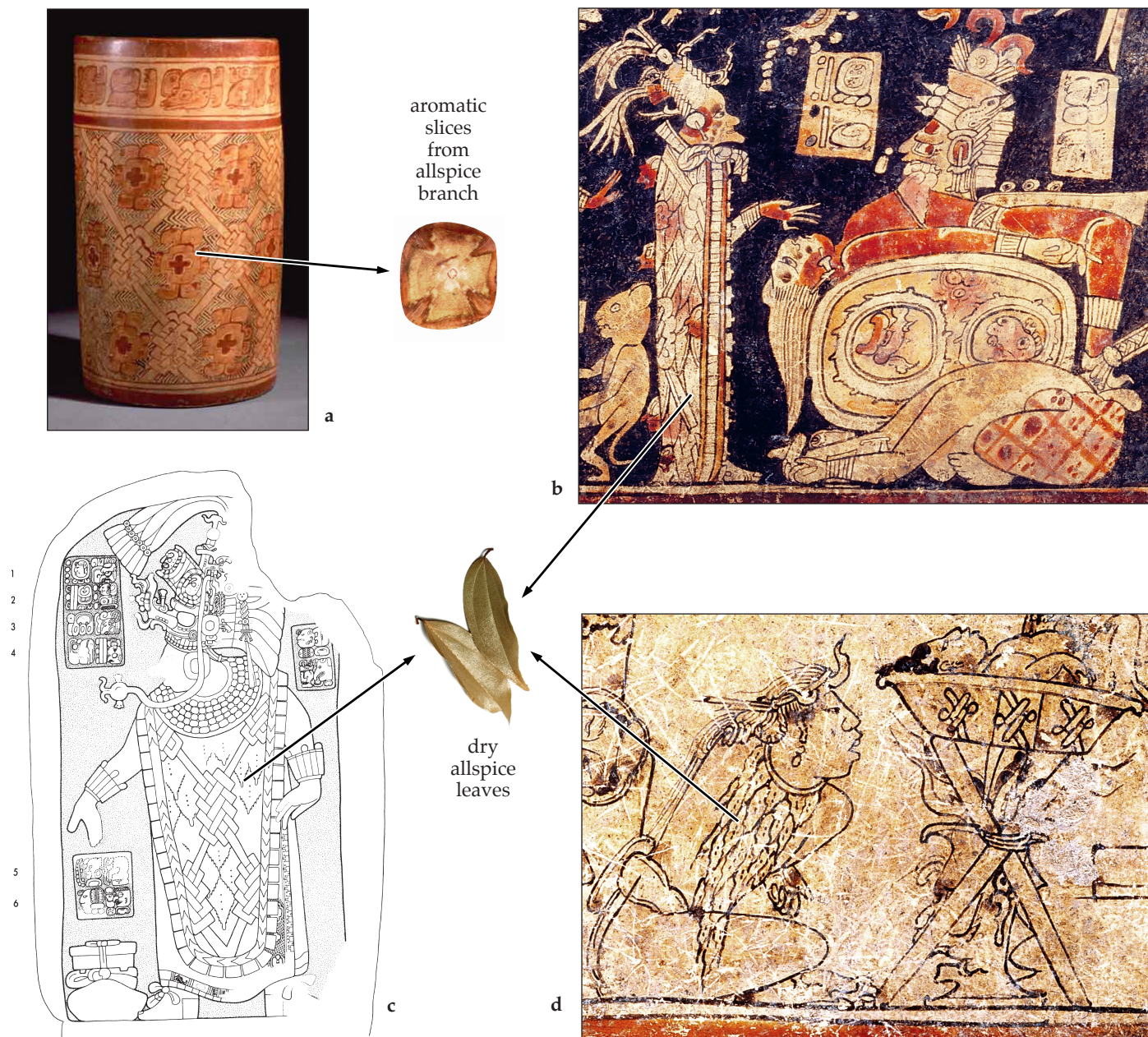


Figure 4. Drawing of the allspice plant, flower, leaves, and fruit (including cross-section). Courtesy of Marty Casado, [ambergiscaye.com/fieldguide/bzplants.html](http://ambergiscaye.com/fieldguide/bzplants.html).



Figure 5. Drawing of detail of photograph K625 by Justin Kerr (drawing by Marc Zender).





**Figure 6.** The allspice cross in Classic Maya imagery: (a) with aromatic scrolls (photograph K5179); (b-d) with allspice leaves (detail of photograph K1377; La Florida Stela 9; detail of photograph K1645. Drawing by Ian Graham (1970:Fig. 9b); all photographs © Justin Kerr.

Chouen up into Q'an Te' ("Yellow Tree"; *cante* in the source: Christenson 2007:2:95, 281, folio 18 verso, line 2816), which begins to grow taller and taller so that they cannot descend. As a result they turn into monkeys. This tree has been identified as madre de cacao, *Gliricidia sepium*, by Recinos (1950:128, n.6). According to historic sources the Maya used to extract a yellow dye from the roots of this tree (see also Christenson 2007:1:143, n. 329). In Q'eqchi' madre de cacao is also *k'ante'* (Maas 2008:167), but in Yucatan it is known by the name Zac-yab (Recinos 1950:128, n.6). *K'ante'* has been discussed

as a group of diverse trees (*k'ante'el* = the precious/sacred forest) by Landon (2011) (for further discussions involving *k'ante'* and *k'an* see also Freidel 2008:200 and Freidel et al. 2002:66-67; Stone and Zender 2011).

The cuttings of madre de cacao do not display a pattern comparable to the allspice tree, and the two trees need different environmental conditions to flourish. Pimento is a medium-sized tree that grows in wet forests. The seedlings benefit from shading until established (Schlesinger 2001:103-105; Seaforth and Tikasingh 2005:72). During the Preclassic and Early



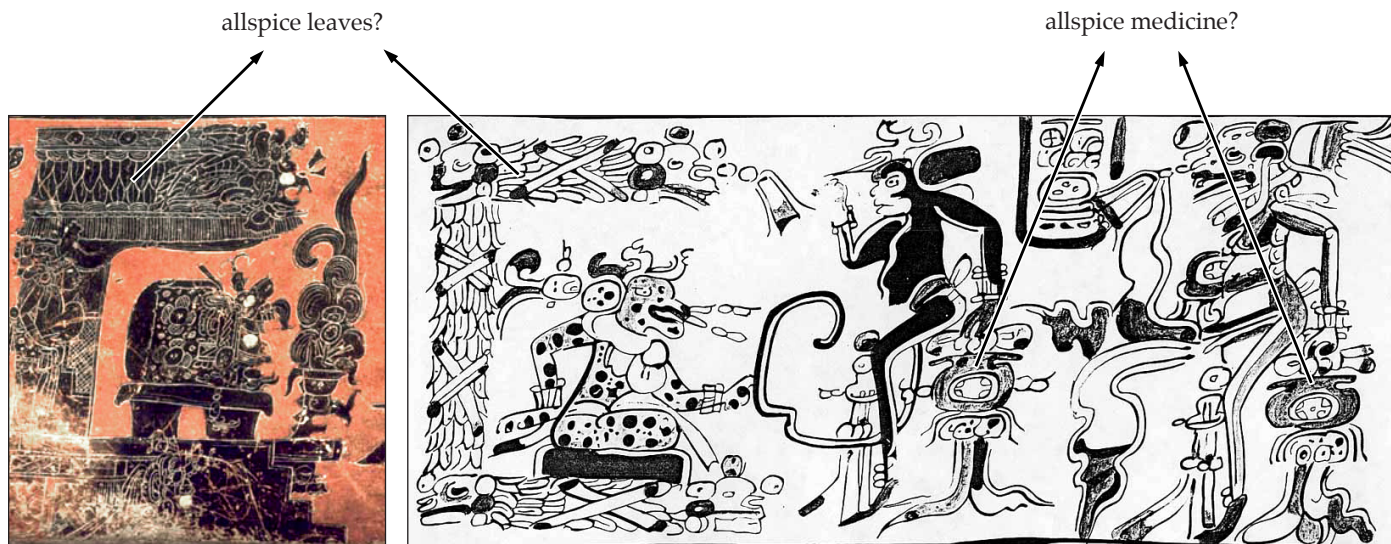


Figure 7. (left) detail of photograph K3844; (right) detail of photograph K3038. Photographs © Justin Kerr.

Classic periods, when tall humid forests still covered most of the lowlands, the high forest taxon Myrtaceae (myrtle family) to which the allspice tree belongs grew in large numbers. During the Late Classic period when the area was deforested, these trees became much rarer (as pollen data shows; e.g., Wahl et al. 2007:217). Madre de cacao is also medium-sized but prefers drier and lower forests because it does not tolerate heavy shade. As its name implies, madre de cacao is often planted in orchards to give shade to cacao trees (Rice 2007:209, n. 14). The existence of a tree called *k'ante'* (yellow tree) in the highlands during the Colonial period and today does not rule out the possibility that the allspice tree was called by that name in the Preclassic and Classic Maya lowlands. However, the identification of *k'ante'* for now remains uncertain.

Based on the evidence presented here, I strongly feel that the K'AN sign and the readings "precious," "yellow," and "ripe" are all based on the properties of the allspice tree (i.e., yellowish bark and yellowish cross in the cuttings, berries which ripen after the harvest, precious wood, good smell, etc.). *K'an* probably also denominates the branches and the tree's aromatic berries, oils, and leaves, which are used to season drinks and food.

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