Theobroma cacao is the tree that produces the seed from which chocolate is processed. Theobroma bicolor is the tree that produces pataxte. If you are shown the seeds or the pods, they look pretty much the same.

But when you see the entire tree, they are as different as night and day. The pataxte tree is tall and has no branches anywhere near the bottom. The cacao tree is a large bush, with branches at many levels and flowers from near the trunk all the way to the top and to the ends of all the branches.

Most chocolate around the world is produced from cacao. Pataxte is rarely used to produce chocolate in commercial quantities. Yet pataxte is clearly mentioned in the mythology of the Popol Vuh. The Quiche Maya knew the difference between pataxte and cacao.

It is ironic that although cacao is primarily a lowland species, both grow in the highlands. I see a lot of pataxte near people’s houses in the San Marcos area near the Mexican-Guatemalan border.

The first pataxte tree I noticed was at Takalik Abaj archaeological site. More pataxte (and cacao) trees are at the delightful hotel Takalik Maya Lodge about 2 kilometers from those ruins.
Cacao also grows in Petén but commercially it is grown primarily in Alta and Baja Verapaz, Sololá, Quetzaltenango, Suchitepéquez, Retalhuleu and San Marcos (Producción Nacional y Características de la Industria del Cacao en Guatemala).

A thousand years ago cacao orchards may have been more widespread, since cacao is often shown in 4th-5th century provincial Teotihuacán-style incense burner lids from throughout the Tiquisate area of Escuintla.

**Cacao in hieroglyphs and in Classic Maya art**

Epigraphers have recognized that one of the common hieroglyphs in the Primary Standard Sequence refers to cacao. It is also known that many of these vases and bowls held the cacao drink (residue is found in the bottom of the vessels). Clearly, cacao was important to the Maya, both during their life and for eternity in their afterlife.

The *Popol Vuh* states that the head of the decapitated father of Hunahpu and Xbalanque was a gourd that hung from a gourd tree. There are two species of this tree, but most archaeologists and iconographers identify the trees on Codex-style vases as being cacao.

There are two ways to handle the discrepancy: first, the version of the *Popol Vuh* that we have today is primarily a highland version; cacao is primarily a lowland plant (though it grows and flowers, even at high elevations). In other words, there were probably several regional versions of the *Popol Vuh* in centuries far before the Quiche...continued on page 58
version was finalized. Cacao may have been part of the mythology in the Petén version of the Popol Vuh.

Or, it could be that most interpretations of the remarkable Verapaz-area vase of the Museo Popol Vuh are wrong; that it is not cacao, but really a gourd, jícara, Crescentia cujete or morro, Crescentia alata.

**Cacao is a fascinating topic to study**

My experience with cacao started at age 19, when I discovered what at first I thought were remains of frijoles in a 9th century polychrome funerary vase. These beans, however, were unlikely frijoles; they were much more likely cacao beans.

I had “beginner’s luck” back then in 1965, because the Tikal pyramid that I was excavating for the University of Pennsylvania Tikal Project turned out to be one of the most fabulous tombs found at Tikal. I wrote my 400 page Harvard undergraduate thesis on this Tomb of the Jade Jaguar (available on our web site in electronic format).

We need to question all other pre-Columbian representations that are always automatically stated to be “cacao.” Many are actually pataxte, which is a species very different in several respects from cacao.

We at FLAAR Mesoamerica wish to continue our 3D laser-scanning project so we can determine whether the 4th-9th century Classic Maya effigy containers show cacao or pataxte. So join us on our field trips to discover more about digital photography that helps advance knowledge of the iconography and ethnobotany of Mayan civilization and the cultures they intersected with such as far-away Teotihuacán.

**Acknowledgements:** We thank Sofía Paredes, curator, and Fernando Paiz for access to the cacao effigy containers in the La Ruta Maya Foundation collections of repatriated Mayan art. We thank Ana Claudia de Suasnabar of El Paseo de los Museos, Susana Campins, curator, and Edgar Castillo of Museo VIGUA de Arte Precolombino y Vidrio Moderno, also Hotel Casa Santo Domingo for access to their collections. And we thank the Nottebohm family for access to photograph their important Tiquisate-area incensario.

**Dr. Nicholas Hellmuth** is director of FLAAR Reports (Foundation for Latin American Anthropological Research). For more information visit www.digital-photography.org. He adds: If you are interested in donating to help us acquire a scanner to bring to Guatemala to help all the projects, please let us know, frontdesk@FLAAR.org. Then we can teach you all about 3D scanning, both for artifacts, as well as the interesting tropical plants that are native to Guatemala, plus fascinating animals of the Petén rain forests, and fruits such as cacao and pataxte.