



# HerbClip™

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**FILE: ■Eastern Lotus (*Nelumbo nucifera*)**

**■Soma**

**■Ethnobotany**

**HC 050654-294**

**Date: December 15, 2005**

**RE: Another Candidate for the Elusive Soma – Lotus (*Nelumbo nucifera*)**

McDonald A. A botanical perspective on the identity of soma (*Nelumbo nucifera* Gaertn.) based on scriptural and iconographic records. *Econ Bot.* 2004;58(Supplement):S147-S173.

The Aryan civilization, a nomadic warrior society known for its shamanic approach to religion (use of narcotic plants for spiritual enlightenment), flourished in present-day India around 1800 BCE. Also known as "homa", the sacred soma plant was a central pillar of Aryan religion from which developed Buddhism, Hinduism, Jainism, and Brahmanism. Soma was the "nectar of the gods", which, when ingested, practitioners believed could make a human immortal and god-like. The author writes that "[s]oma was identified as both the cause and effect of the cosmos: both the father and child of the Aryan pantheon."

The identity of soma is a subject of debate among modern scholars. Plants as diverse as marijuana (*Cannabis sativa*), various *Ephedra* spp., ginseng (*Panax* spp.), opium poppy (*Papaver somniferum*), and grapes (*Vitis* spp.), as well as hallucinogenic fungi, such as fly agaric (*Amanita muscaria*), have been proposed to be soma. The identity of soma was known only to Aryan priests, but was portrayed metaphorically in the *Rg Veda*, *Sama Veda*, *Yajur Veda*, and *Atharva Veda*.

Based on a botanical analysis of ancient texts and iconography, the author proposes that soma is the eastern lotus (*Nelumbo nucifera*). Descriptions of soma in the *Rg Veda* reveal a plant remarkably similar to eastern lotus in both plant habit and anatomy. The Vedic hymns describe a plant that grows "joint by joint, knot by knot," and a plant that grows shoots like arrows. A critical examination of these and other Vedic hymns reveal a plant that "probably produced procumbent shoots with prominent nodes and internodes" which is an accurate description of eastern lotus' habit. Other hymns also describe a plant that is similar to eastern lotus. Soma is compared to the sun and described as having a "golden" and "ruddy radiance" in the Vedic texts, similar to the golden-red flowers of eastern lotus in bloom.

The author writes "it is widely acknowledged that the image of the lotus has long served as a versatile and important religious symbol in the mythic and iconographic traditions of the East." The author contends that the mythical symbolism of the lotus is linked to the eastern lotus' history as soma. The origins of most of the Vedic pantheon and most Hindu and Buddhist gods and goddesses are traced to soma.

Eastern lotus has psychoactive constituents that could have produced the feelings of euphoria experienced by the Aryan priests who ingested soma. These constituents include benzoisoquinoline alkaloids such as aporphine, proaporphine, and nuciferine that are structurally similar to opiates and may have similar effects when ingested. Soma sacrifice in myth and in historical records may have been recounting an extraction procedure for these psychoactive constituents. Historical accounts of Aryan soma sacrifice by early Brahmanic communities describe a process in which "Aryan priests used stone mortars, pestles, and pressing boards to extract the inebriating sap of soma stalks." Huge mortars and pestles are still found today in Hindu and Buddhist temples throughout the Indian subcontinent and Southeast Asia, where they are used as altars and as fertility symbols.

Another argument for the identity of eastern lotus as soma is that the eastern lotus' natural distribution today overlaps the area where the Aryan civilization once flourished. In addition, the links between soma and water recalls the aquatic habitat of eastern lotus. Soma's identity as eastern lotus still needs pharmacological and archaeological confirmation. Sampling of present-day wild eastern lotus populations and phytochemical testing of these plants is needed to confirm the presence of psychoactive constituents. A re-examination of the archaeological record is also needed to confirm the identity of soma as eastern lotus.

—*Marissa Oppel, MS*

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