The Origin and Expansion of Sugar Production in the Islamic World

The Origin of Sugar Production and its Expansion to West Asia

The Origin of Sugarcane Cultivation
Wild sugarcane plants, indigenous to India and Southeast Asia, were hybridized in New Guinea to create a domesticated plant variety called *Saccharum Officinarum* in Latin (denoting “sugar of a druggist”). Sugarcane is a perennial large grass, two to four meters high, with its widest stalks up to four centimeters in diameter. Domesticated sugarcane plants hybridized in New Guinea were introduced into Indonesia, Malaysia, India, and South China during the last several centuries BC. This type of sugarcane, which was previously thought to have first appeared in India and then spread to neighboring regions, is now thought to have originated in southern New Guinea.

Allow me to quote some viewpoints on this issue. E.O. von Lippmann, who pioneered the historical study of global sugar production, has said that sugarcane clearly originated from Northeast India, specifically from the Bengal province.¹ Yet, Sucheta Mazumdar, an historian of sugar production in modern China, is careful not to identify a point of origin, stating that sugarcane growing was introduced into South China sometime after the third century BC by way of Southeast Asia or East India.²

However, Noel Deerr, the author of *The History of Sugar*, believed that sugarcane originated in New Guinea and spread to Southeast Asia, India, and China.³ Andrew M. Watson also held that early domestication and hybridization may have occurred in the New Guinea region,⁴ while Christian Daniels says that shifting agriculturalists of Southeast Asia, Indonesia, Melanesia, and Polynesia planted sugarcane in mixed gardens in prehistoric times.⁵ Although its true origin is still uncertain, sugarcane cultivation is generally considered to have originated somewhere between New Guinea and Indonesia, a few centuries BC. From these early times, through long after the systemization of sugar

³ Deerr, *The History of Sugar*, vol. 1, p. 16.
manufacturing, raw sugarcane was chewed and sucked for its sweet taste, or cooked and eaten.\textsuperscript{6}  

\textit{The Origin of Sugar Production}

So then, when and where did sugarcane cultivation for sugar production originate? First, Deerr refers to \textit{The Geography of Strabo}: He (Nearchus – an admiral in Alexander the Great’s army) also states, concerning the reeds, that they produce honey, although there are no bees, and in fact that there is a fruit-bearing tree from the fruit of which honey is compounded, but that those who eat the fruit raw become intoxicated.\textsuperscript{7} Minoru Kawakita, based on this description, further explained that Alexander’s soldiers were delighted when they discovered this solid honey, not made by bees, in North India.\textsuperscript{8} But it should be noted that Nearchus only states “reeds that produce honey”, not referring to “solid honey” or “sugar candy”. Furthermore, Sidney W. Mintz, in his book \textit{Sweetness and Power}, raises serious questions about Deerr’s interpretation of this (Nearchus’s statement) as a reference to sugar cane, but his citations of Greek and Roman authorities are not entirely convincing.\textsuperscript{9}

According to Mintz, \textit{Materia Medica} by Dioscorides (a Roman herbalist in the first century) reads: “There is a kind of concreted honey, called saccharon, found in reeds in India and Arabia Felix (now Yemen), like in consistence to salt, and brittle to be broken between the teeth, as salt is. It is good for the belly and the stomach being dissolved in water and so drank, helping the pained bladder and the reins.”\textsuperscript{10} However, Mintz also notes: “Some students of sugar history suppose that saccharon referred to an entirely different substance, the so-called sugar of bamboo, a gum that accumulates in the stems of certain bamboos and has a sweet taste.”\textsuperscript{11} When we re-read this sentence in \textit{Materia Medica}, it describes “a kind of concreted honey, called saccharon, found in reeds”, not saccharon made of reeds. So, this description is not enough to lead to the conclusion that a method for producing granulated sugar crystals from boiled sugar juice originated around the first century AD.

\textsuperscript{6} Watson, \textit{Agricultural Innovation}, p. 24.
\textsuperscript{8} M. Kawakita, \textit{A World History of Sugar}, p. 14.
\textsuperscript{9} Mintz, \textit{Sweetness and Power}, p. 20.
\textsuperscript{11} Mintz, \textit{Sweetness and Power}, p. 20.