



***Nicotiana quadrivalvis* Pursh** Indian tobacco

Tobacco was an important plant in the social and economic exchange networks of the Arikara Indians and their neighboring tribes. Lewis wrote a lengthy description of the cultivation methods and thought that Nicotiana quadrivalvis could also grow on the East coast.

As Lewis and Clark moved up the Missouri River in early October 1804, they came across several Arikara villages showing signs of a vibrant agriculture. Like the Mandan and the Hidatsa, the Arikara lived in permanent settlements and were farmers as much as hunters. Lewis and



George Catlin's View of the Riccaree Village, 1841
Photo Smithsonian Institution

Clark's party wrote a few notes about the agricultural fields and gardens the Arikara kept outside their villages, and where they planted not just a lot of corn, but also beans, sunflowers, watermelons, and tobacco. Lewis also counted three types of squash. The

watermelons, native to Africa, were probably introduced by the Spanish around 1500. The type of tobacco grown by the Indians of the

Great Plains, and identical to wild forms present in southwest California, Oregon and Nevada, would have migrated from cultivation by the Indians (Earle and Reveal 2003:20&51-52, Johnsgard 2003).

The so-called Indian tobacco caught Lewis's interest, probably because it was different from what he had seen in the East. As Sgt. Gass noted, Arikara's "*tobacco is different from any I had before seen; it answers for smoking, but not for chewing*" (Gass journal, October 10, 1804 in Moulton 2002:vol.10). Lewis also remarked that the Arikara Indians cultivated tobacco for smoking as they "*neither snuff nor chew.*" Very fragrant and light flavored, Lewis wrote he "*found it very pleasant. It does not affect the nerves in the same manner that the tobacco cultivated in the US*" (Lewis journal, winter 1804 -N° 108).

The Arikara, Lewis explained, planted two kinds of tobacco, a "*larger species*" (*Nicotiana quadrivalvis*) and a "*smaller species*" (believed to be *Nicotiana rustica*). He was impressed by the care Indians took in the farming of their tobacco, and he wrote a very detailed description of the methods of cultivation and drying, based on his own observations and information gathered in talks with Indians and French traders living in the Indian villages.

Tobacco had a strong social status and genuine economic significance for the Arikara. It was smoked at social gatherings and meetings with other tribes. Even though corn was the major trade item, tobacco was also sold to the Teton Sioux and the Cheyenne, who had abandoned farming when they settled in the plain (Ronda 1984:50).



An aged man of the Arikara tribe gathering his tobacco in Gilmore 1919 pl.28b - Photo Smithsonian Institution

Nicotiana quadrivalvis was highly prized according to Lewis: “It is esteemed a great delicacy among these people, they dispose of it to their neighbors the Assinouboins & others who visit them for the purpose of Traffick from whom they obtain a high price” (quoted in Moulton 1997 vol. 11:466).

Lewis probably assumed Jefferson would like to include this new plant to his horticultural experiments at Monticello, so he sent seeds of both species with a shipment of other specimens. Jefferson was, however, not thrilled as he found the tobacco “a singular species, uncommonly weak & probably suitable for segars [sic]” (quoted in Cutright 1969:371). The horticulturist Bernard McMahon, who received seeds from Jefferson, wrote to Jefferson on April 2, 1807 that he had “fine crops already up of the Aricara Tobacco and perennial flax” (quoted in Cutright 1969:372), but he did not pursue the cultivation.

Nicotiana quadrivalvis was believed to be extinct in the 1920s. This proved incorrect. In 2002 when researching on the expedition’s plants, the botanist James Reveal found *Nicotiana quadrivalvis* growing in a garden plot of the Fort Union National Historical Site, near Yellowstone River (Earle and Reveal 2003:57). The second species grown by the Arikara, *Nicotiana rustica*, very common east of the Mississippi River, is still cultivated today.

Bibliography

Catlin, George. 1841 . *The manners, customs and condition of the North American Indians; written during eight years' travel amongst the wildest tribes of Indians in North America, 1832-39, Letter n°25: Little Mandan village, Upper Missouri*, vol. 1 - Published by the author, London.

Cutright, Paul Russell. 1969 . *Lewis and Clark: Pioneering Naturalists* - University of Nebraska Press, Lincoln and London

Earle, Scott A. and Reveal, James L. 2003 . *Lewis and Clark's Green World, The Expedition and its Plants*. Farcountry Press

Gilmore, Melvin Randolph. 1919 . *Uses of the plants by the Indians of the Missouri River Region*. Govt. print. off., Washington DC.

Hatch, Peter. 2003 . "Public Treasures": Thomas Jefferson and the Garden Plants of Lewis and Clark. *Twinleaf Journal*, Thomas Jefferson Center for Historic Plants at Monticello. Article also available as an electronic resource:
<http://www.twinleaf.org/articles/treasures.html>

Johnsgard, Paul A. 2003 . *Lewis and Clark on the Great Plains, A Natural History*. University of Nebraska Press

Moulton Gary L. ed. 1997 . *Journals [The] of the Lewis & Clark Expedition*, volume 11. University of Nebraska Press. [Fort Mandan Misc. Part 3: botanical collections page 466, Vaughan, Donations November 16, 1805 from Meriwether Lewis Dried Plants &c put into Dr. B. S Barton hands for examination: label attached to the corolla Lewis shipped]

Ronda, James P. 1984 . *Lewis and Clark among the Indians*. University of Nebraska Press, Lincoln. See Chapter 3: The Arikara Interlude

Thwaites, Reuben Gold. 1959 . *Original Journals of Lewis and Clark expedition 1804-1806*, volume 4. Antiquarian Press LTD, New-York . (first edition 1904-1905)

Note: Otherwise mentioned, the quotes from the journals are from Thwaites 1959.

Internet Resources

The text of the University of Nebraska edition of the Lewis and Clark journals edited by Gary Moulton is available at "*The Journals of the Lewis and Clark Expedition Online Edition*" -
<http://lewisandclarkjournals.unl.edu/>

Dominique Harre Rogers
Edited by Rusty Russell