

BRIEF COMMUNICATIONS

THE BOTANICAL IDENTIFICATION OF NORTHWEST COAST TOBACCO

A problem which has long interested anthropologists is that of the identification of the plant chewed with lime by the Haida and Tlingit. Dixon approached this problem on several occasions with his usual thoroughness,¹ but could never offer what he felt might constitute a defensible and conclusive answer. Dixon, in his *American Anthropologist* article, concluded that it was "probable that the plant cultivated and chewed by the Tlingit and Haida was something other than tobacco" (p. 150), and left the problem for some botanist familiar with the regional flora. It would seem now that such a savior has come forth in the person of the well known western botanist, Miss Alice Eastwood, of the California Academy of Sciences.

Captain George Dixon, in 1787 at Port Mulgrave (Yakutat Bay, occupied by northern Tlingit), stated:²

The Indians are particularly fond of chewing a plant, which appears to be a species of tobacco; not content, however, with chewing it in its simple state, they generally mix lime along with it, and sometimes the inner rind of the pine-tree, together with a resinous substance extracted from it.

This description obviously indicates that the Tlingit plant looked like a tobacco (*Nicotiana* sp.) plant, and is therefore clearly not as lupine as Dixon suggests.³ That Dixon knew the difference between the two is indicated by the fact that he collected a specimen of the tobacco plant used by the Haida on the Queen Charlotte Islands. This specimen, now in the Herbarium of the British Museum, has been discussed by Miss Eastwood, who calls attention to the fact that Dixon's specimen is similar to that collected by Archibald Menzies and now in the Hooker Herbarium at Kew.⁴ The critical point, then, is the identification of these plants labeled by the

¹ R. B. Dixon, *Tobacco Chewing on the Northwest Coast* (*American Anthropologist*, Vol. 35, 1933), pp. 146-150. In this paper will be found extensive references to the subject. See also his *Contacts with America Across the Southern Pacific*, pp. 330-335, in D. Jenness, *The American Aborigines* (Toronto, 1933), pp. 315-353.

² George Dixon, *A Voyage Round the World, but More Particularly to the North-west Coast of America; Performed in 1785 . . . 1788* (London, 1789), p. 175. For other references see R. B. Dixon (*American Anthropologist*, Vol. 35, 1933), pp. 146-150, and *Menzies' Journal of Vancouver's Voyage*, edited by C. F. Newcombe (Archives of British Columbia, Memoir V, Victoria B. C., 1923), pp. 141-142.

³ R. B. Dixon (*American Anthropologist*), p. 150. James Deans, *The Haida Kwil-ra, or Native Tobacco of the Queen Charlotte Islands*. (*American Antiquarian* 12, 1890), pp. 48-50, identifies the Haida tobacco as a species of poppy, a plant with tall stems; on the extremity of each stem were a number of balls full of seeds. See also, by the same author, *The Hideray Quill-Ray*. (*American Antiquarian* 19, 1897). (I have not seen this latter paper.)

⁴ A. Eastwood, *The Tobacco Collected by Archibald Menzies on the Northwest Coast of America*. (Leaflets of Western Botany 2: No. 6, San Francisco, 1938), pp. 92-94. See also her *Early Botanical Explorers on the Pacific Coast and the Trees They Found There*. (*California Historical Quarterly*, 18: 1-12, 1939), p. 3.

explorer-botanist as "Indian Tobacco." Miss Eastwood says the plant "does not agree with any other tobacco from northwest America and may still be unnamed and undescribed,"⁶ and in a more specific statement, that "the specimen most closely allied to Capt. Dixon's specimen is *Nicotiana multivalvis* Lindl. collected by Douglas in 1825 . . ." ⁶ Thus, the botanical evidence seems to indicate (see also the comparison of Dixon's specimen with *N. multivalvis*⁷) a new, and as yet unnamed, *Nicotiana* species as the tobacco used by the Haida of the Queen Charlotte Islands. As R. B. Dixon⁸ and C. F. Newcombe⁹ point out, the plant described by Lindley¹⁰ as *Nicotiana nana* and listed by Hooker¹¹ with the provenience given as "N. W. America" and "originally discovered by the excellent Menzies'" is actually a species of *Hesperochiron* and not a *Nicotiana*. It was collected by William Bird in the Rocky Mountains of North America; the mistake may be blamed to Lindley and later, Hooker, who erroneously took it to be the specimen collected by Menzies. Menzies' tobacco is the plant shown by Miss Eastwood; it resembles the Dixon specimen which is also illustrated,¹² and is identifiable as a *Nicotiana* species. In a letter from Miss Eastwood on this question, she says:

I am sure that Capt. Dixon's specimen was a tobacco. I have only Menzies' statement that the leaves in Kew Herb. are those of tobacco. Menzies' specimen cannot be *Hesperochiron* which I know well from plants seen and collected in California. None have leaves similar to the Menzies leaves and the pubescence is different. Menzies leaves do resemble tobacco leaves. . . . By the way, Dixon's specimen in Herb. Brit. Mus. could never be mistaken for a lupine.

Dixon¹³ discusses and rejects Setchell's¹⁴ identification of the Haida tobacco as *Nicotiana attenuata*. In support of Dixon, I offer the following quotation from a letter which Miss Eastwood has kindly written in answer to my question as to the possibility that Dixon's specimen might be *Nicotiana attenuata*. She says:

The tobacco which Menzies collected could not possibly be *N. attenuata*, which I know well. The basal leaves of that are not at all the same shape. The flowers of Capt. Dixon's specimen resemble those of *N. multivalvis* much more closely than those of *N. attenuata*. In my article I describe the differences between the Dixon specimen and *N. multivalvis*. It could not possibly be related to *N. attenuata*.

A further point of interest in connection with this problem may be brought up

⁵ Eastwood (1938), p. 92; (1939), p. 3.

⁶ Eastwood (1938), p. 92.

⁷ *Ibid.* p. 93.

⁸ (American Anthropologist 35, 1933), p. 149.

⁹ *Menzies' Journal*. (Archives of British Columbia, Memoir V, 1914), p. 141.

¹⁰ Botanical Register X, tab. 833, 1824.

¹¹ *Flora Boreali Americana* II, 1840, p. 91.

¹² Eastwood, 1938: pl. 2 (Cf. to *N. multivalvis* in the Botanical Register, tab. 1067).

¹³ (American Anthropologist 35, 1933), p. 146; *Contacts with America* . . . p. 333.

¹⁴ W. A. Setchell, *Aboriginal Tobaccos*, (American Anthropologist 23, 1921), pp. 397-414.

C. F. Newcombe is the original authority of Setchell.

here—that of the use by R. B. Dixon¹⁵ and James Deans¹⁶ of myths as historical documents. Euhemerism is ordinarily, at best, a hazardous and inconclusive method of getting facts. It may often corroborate known facts, but here mythologic items are supplementary, not primary. In the present case we have seen that with the known fact that the Haida tobacco is a *Nicotiana* species, the interpretation from the mythology breaks down, since it was formed around the theory that the plant was not of the genus *Nicotiana*. Furthermore, with this botanical fact established, one might re-interpret the Haida myths in such a way that certain inferences to support the botanical identification could be suggested. The real question then becomes one of how much actual value the myths are, unless they unequivocally support facts already established. I am not generalizing, but the question has occurred to me so frequently that I offer this example for what it may be worth in illustration. In short, I doubt the value of these particular myths as independent evidence.

There still remains the problem of the identification of the Tlingit tobacco. That it is a *Nicotiana* species seems likely, since Capt. Dixon states it as such, and we have seen that he knew *Nicotiana* plants by sight. We can do no better than reiterate R. B. Dixon's plea that botanical collectors on the Northwest Coast keep their eyes open for *Nicotiana* plants.

ROBERT F. HEIZER