

in their account of Valentin Fernandez's visit to West Africa prior to 1506, report his statement that *milho zaburro* flourished in San Tomé where it was planted for the first time in 1502, having previously been shipped thither from the coast of Guinea. Here is evidence that *milho zaburro* was a well-established crop on the coasts of Guinea before 1502. If *milho zaburro* is maize, then it could not possibly be a well-established crop on the coasts of Guinea if it was first introduced into Spain in 1494, which is the earliest date by which Columbus could have introduced this cereal. It follows that if *milho zaburro* is maize, it must have existed in West Africa long before Columbus.

It is necessary to show that *milho zaburro* is maize. Soares de Sousa (ref. 9, 162), writing in 1587, says: "Dá-se outro-mantimento, em todo o Brazil, natural da mesma tena, a qui os indios chamam *ubatim*, qué é o milho de Guiné, que em Portugal chamam Zaburro . . ." Now *milho de Guiné* is still the name in Brazil for maize. A Portuguese dictionary of to-day gives: *Zaburro*, Indian corn, maize.

The question now arises: Who, then, brought maize to Africa before Columbus was born? My researches over the past seven years have now accumulated sufficient data¹⁰ to establish Arab-Negro contacts with the Americas beginning about A.D. 900.

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¹ Goodwin, A. J. H., *S. Afr. Arch. Bull.*, 8, No. 29 (1953).

² Burton, R. F., "Abeokuta and the Cameroon Mountain" (London 1863).

³ Moore, E. O. O., "History of Abeokuta" (London, 1916).

⁴ Babalola, A., *West African Rev.*, 23, No. 292 (1952).

⁵ Burns, A., "A History of Nigeria" (London, 1929).

⁶ Talbot, P. A., "Southern Nigeria" (Oxford, 1926).

⁷ Meek, C. K., "Tribal Studies in Northern Nigeria" (Oxford, 1931); "A Sudanese Kingdom" (London, 1931).

⁸ Monod, T., Teixeira, da Mota, and Mauny, T., "Description de la Côte Occidentale d'Afrique par Valentin Fernandez" (Bissau, 1951).

⁹ Soares de Sousa, G., "Tratado descriptio do Brazil em 1587" (Rio de Janeiro, 1879).

¹⁰ Jeffreys, M. D. W., *Scientia*, Juillet-Août (1953).

Non-standard Radio Propagation

SQUADRON LEADER A. G. SHEFFIELD, R.C.A.F. (VE3EB), has reported the following occurrence of non-standard radio propagation observed in Ottawa:

| Date | Time (EDT) | Frequency | Location | Remarks |
|---------|------------|--------------|--------------------------------------|--|
| June 23 | 1900-2030 | 66-72 Mc./s. | WADS-TV Kansas City (915 n.m.) | Estimated signal up to 200 microvolts (received on indoor half-wave antenna) |
| June 24 | 1300-1400 | 60-66 Mc./s. | KMA-TV Omaha, Neb. (897 n.m.) | Steady signal with intermittent out of phase components displaced approx. 3 microseconds |
| June 24 | 1300-1400 | 66-72 Mc./s. | Not identified | Weak signal, origin unknown |

He comments: "During this period, other long-range reception was evident over the frequency range of 54-72 Mc./s., but there was no opportunity for identifying it. Tests were made using a horizontally polarized co-linear antenna array consisting of four dual-stacked elements about 80 ft. above ground; 360° rotation of this antenna, which has a beam-width to 3 db. points of about 10°, did not change

the strength or otherwise affect the signals observed. For the duration of this extraordinary long range very high-frequency reception, normal signals of a few microvolts from television stations about 100-180 miles distant could not be obtained".

The Rockcliffe weather office of the Department of Transport has very kindly furnished weather maps and an interpretation for the period June 21-25. It appears that the conditions at the time are very common for the region; these are a weak frontal surface giving a stable layer at about 10,000 ft. for the period of abnormality together with a surface inversion at about 1,000 ft. during the nights. *Radio-sonde* data are normally available at several points on or near the path.

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Zoological Nomenclature

NOTICE is hereby given of the publication of the following cases in the Class Aves involving the possible use of its plenary powers by the International Committee on Zoological Nomenclature for the purposes specified in brackets against each entry. Full particulars of these cases have been published in the *Bulletin of Zoological Nomenclature*, in Triple-Part 1/3 of Volume 9.

(1) *Colymbus* Linnæus, 1758, and *Gavia* (all uses prior to *Gavia* Forster, 1788) (suppression); (2) *caspicus* Hablizl, 1783, *Colymbus* (suppression); (3) *cafra* (Otis), *cafer* (*Cuculus*), *sulphuratus* (*Cuculus*), *flavescens* (*Lanius*), all of Lichtenstein, 1793 (suppression); (4) *nortoniensis* Gmelin, 1789, *Fringil.* (suppression); (5) *natka* (*Lanius*) and *septentrionc.* (*Lanius*), both of Gmelin, 1788, and *eimeen* (*Columba*), *unalaschkensis* (*Hirundo*), *borealis* (*Motacilla*), *cirrhatius* (*Pelecanus*), *australis* (*Sterna*), all of Gmelin, 1789 (suppression); (6) *phaeus* (*Turdus*), *elegans* (*Motacilla*), *chlorotis* (*Muscicapa*), all of Forster, 1794, and *novae-hollandiae* Latham, 1790, *Muscicapa* (suppression); (7) *Pyrrhocorax* Tunstall, 1771 (validation, for the Chough); (8) *philomelos* Brehm, 1831, *Turdus* (validation, for the Song Thrush); (9) generic name *Vermivora* and trivial names *lutea* (*Muscicapa*), *pensylvanica* [sic] (*Passer*), *americ.* [sic] (*Vermivora*), all of Linnæus, 1776 (suppression); (10) *migratoria* Linnæus, 1766, *Columba* (validation, for the Passenger Pigeon); (11) *Bubo* Duméril, 1806, *Coturnix* Bonnatere, 1790, *Egretta* Forster, 1817, *Oriolus* Linnæus, 1766 (validation, by suppression of senior homonyms published by Brisson in 1760); (12) *Capella* Frenzel, 1801 (validation, by suppression of *Gallinago* Brisson, 1760); (13) *Myiobius* Darwin, 1839 (validation and designation of type species); (14) *cyanea* Hume, 1877, *Muscitrea* (validation, by suppression of *cyanea* Vieillot, 1818, *Muscicapa*); (15) *ferruginea* Hodgson, 1845, *Hemichelidon* (validation, by suppression of *ferruginea* Merrem, 1784, *Muscicapa*).

Comments on the above cases should be sent to me as soon as possible.

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