-THNC.

EAST AFRICAN COMMUNITY Ma Aksa

TELEGRAMS:

''AGFORORG'' NAIROBI

TELEPHONE: 22

KIKUYU 2121, 2122 & 2123

RAILWAY STATION

KIKUYU

Our Ref. AF/554/017/61.



EAST AFRICAN
AGRICULTURE AND FORESTRY
RESEARCH ORGANIZATION
P.O. Box 30148
NAIROBI, Kenya

12th July, 1974.

The Director, The British Institute in East Africa, P.O. Box 47680, NAIROBI.

Dear Chittick.

Charcoal Specimens from Axum

- 1. I was referred to you recently by Dr. M.D. Gwynne of the F.A.O. Range Management project in connection with the identification of some charcoal specimens excavated at Axum. I subsequently called at your office on 2nd July and obtained two specimens from Dr. Phillips.
- 2. The first specimen was from an upright post from a house at Axum with your reference AX 74 (W (IA). This appears to be charcoal from a Cordia sp. and matches well with our specimens of Cordia africana Lamarck (= C. abyssinica R. Brown). Several species of Cordia occur in East Africa of which only a few reach timber size. This small specimen I took came from a stem of more than 20cm radius and, if Cordia africana occurs in the vacinity of Axum, this was probably the species used. It has a soft, easily-worked handsome timber and was (until very recently) commonly used for furniture, doors, shutters and simple joinery in Kenya. (We haven't got specimens of the shrubby species for comparison, but I doubt if species could be certainly distinguished from carbonized material anyway).
- 3. The second specimen was from a carbonized tree from near the house with your reference AX (IW). This tree was an Acacia. The specimen comes out from our key cards as A. lahai Bentham or A. abyssinicus Bentham. These two species have virtually identical wood anatomy and are distinguished by colour not visible in a charcoal specimen. Both are species occurring in high altitude grassland on the edges of highland forest in Kenya, but I'm afraid I don't know their distribution in Aethiopia.
- 4. Dr. Phillips also enquired about the possible age of the tree at the time it was burnt. We can't judge the age of the tree from the small specimen I took because we don't know its position in the original tree. The growth rings in the specimen give a radius of about 9cm and the mean ring width from the eight rings measurable was 3.4 mm, so we may estimate the age of the specimen as $90/3.4 \Rightarrow 26$ years. This of course is a very crude estimate because it assumes that the tree puts on radius at a constant rate throughout its life, which most trees do not; they tend to start growing fast and slow up later.

I hope the above provides the information you required,

Yours sincerely,

W.G. Dyson,

Tree Breeder, for DIRECTOR.

Les Cole