EXPEDITION No.9, 1971 Four Continents (London, Ethiopia, India & Mexico) Transcript

Note: The copy of this Notebook, as it was given to me, seems to be two books: one has the daily log from Oct. 3, 1971 (3X71) to Nov. 20, 1971 (20XI). The other appears to be meeting notes. It would seem that Harlan is taking this trip to attend meetings and to evaluate work done by others — especially his two students, Chheda and Kanti, who are both Indians working in Nigeria.

Much of the following transcript consists of summaries of the entries and not full transcript. Harlan does not seem to be doing very much collecting on this trip, but rather attending meetings, the nature and subject of which remains obscure. Sometimes Harlan will use parentheses (comment). Those are his comments. I put my comments bolded [in square brackets]. Harlan is using Roman Numerals in his dates: ex. 3X71 is Oct. 3, 1971. On 18X he stops including the year in the date. [BOTT] means that the last line(s) are lost in the copying of that page. To better track Harlan's movements, I have used bolded names of places (usually cities) the first time they are used.

Did some collecting: see 14XI, 18XI, etc.

3X71 (Sunday) Made the flight from **Chicago** to **London**, after transferring from Pan Am to TWA "Pan Am must think people believe everything they say." At London ran into Shanim A. Farugi "on a street corner" and he took JRH to dinner. "It was good to see him, but he stuck like glue & I was still off schedule. We had a drink at my hotel & then I excused myself. Monday¹ was gone."

London Phase (Oct 5-8, 1971; 4 days) [See Kew Notes Oct 5, 1971 in second Notebook]

- 5X71 [Tues.] "To the herbarium & usual good welcome by Clayton & Bor. Eventually started the Panicums."
- 6X71 Back at Kew. Emperor of Japan was visiting so he went Richmond and saw Thoz Cook & Co. and bought a ticket to Brussels on the RR. Shopped & didn't see much & finally back for a rest.

 Went to Jaspers myself in eve.
- "Did the <u>Eleusine</u> with help of Mrs. Phillips." He took Clayton, Boz & Shanim to lunch again at Jaspers. He had not seen Bor in 11 years (i.e. 1960). He has been in India for 26 years. "Left in eve. for downtown & wound up at the Royal a tourist dump but O.K. for a couple of nights." [BOTT] [See second volume, page 13.]
- 8X71 "Took the 7:45 for Birmingham but **Jack Hawkes** had gotten the message wrong; so finally called him & he came down & got me. It was a good visit mostly about his MSE Course³ but he takes it very seriously & probably does a good job. I talked to them in seminar mostly about Maize Tripsacum interaction. They looked like they were getting nothing but came up with very bright questions & seemed like an alert group. At 5:00 pm there was a sherry party for the new

¹ Monday, October 4, 1971 – it was lost in the flight and jet lag, etc.

² This is a genus of grass native to Africa, sometimes called Goodgrass.

³ The only use of MSE course I could find was "Materials Science Engineering". Is this what Hawkes was teaching?

students which was very nice. We should do that, but -. Two most attractive young ladies – one Turkish and one Nigerian. They should go far. Jack took me out to his house, a quick dinner – his wife's name is Barbara –got me to 8:15 train & back to Euston Station by 10:00 pm." [THIS KIND OF THING IS HARDLY WORTH MY TIME TRANSCRIBING. HVH2]

Brussels Phase (Oct. 9 – 11; 3 days)

- 9X71 Train & boat ride to Brussels. Ended up in a low grade hotel next to a whore house.
- 10X71 Got a new hotel, after much to-do. Went to Gare du Midi. Had to waste a lot of time, but finally got settled but the hotel had no soap. That did not come with the room. All the stores were closed so "went into hotel lavatory & stole some soap. Hope the rest of the guests do the same." Went to dinner at an Indonesian restaurant. "Very good but my stomach wasn't taking it any more. Bad night w. little sleep. I've got to remember about that. Everything was closed on Sunday so had to make reservations for a plane, although the train is more fun."
- 11X71 Spent a long day in the herbarium. Dr. L. Liben is the man to see about the African collection.

 They didn't seem to have a whole lot of stuff. "Wound up at 5:30 found Liben & said goodbye should send him some reprints."

[See Brussels Notes 11X71 in second book, page 13]

Rome Phase (Oct. 12-14; 2 days)

- 12X71 Flew to Rome. Saw Jorge and Erma [Bennett]. Feeling a bit rocky & everybody here seems to have colds. Seem to have no ambition & am not doing my homework like writing letters & stuff."
- "To FAO & Jorge got a man to bird dog a Nigerian Visa. Travel man took ticket to change route through Addis Ababa & we worked it out. **[bott]** w. Jorge." Now, he goes off into something about C14 dating of sweet potatoes in Hawaii. Did I miss a page? Anyway, he says: "Lunch at Itolo's & aft in library feeling very rocky indeed." Looked at some old books for some time. "By the time I got to hotel I was in no mood for anything. Went to bed about 6:30 pm, got up about 9:00 pm & ate pills & slept until 6:30 am."
- 14X71 Feeling better after all that sleep, up at 6:30 but no one else up. Wrote letters, met Bob Picket. Went to Jorge's apt. for lunch very nice. Talked with him about coconuts. Wandered around and finally got on the plane. It was good that it had air conditioning this time." In his spare time he is reading a French translation of <u>Cockburer's Travels in Cost Rica</u>. All this is just busywork.
 - [PN] Clayton Review of gu?? Hypuheimer 1969 [PN notes for Oct 14, 15 & 16 were kind of scralled across the page as if they were all one note and not meant to be on three different days. Very difficult to make out what he has written & prob. of little importance.]

Ethiopian Phase (Oct. 15-23, 1971; 9 days) [4th trip to Ethiopia; prev.: 1960 & 1969-70 and late 1970]

15X71 Flight to Addis with stop at Asmara, "seats too small & bad night. On to Addis, met by a Temtim Lemma, **PR man for Inst. of Ag. Res.** Clearance very slow as usual and he had almost given me up. Anyway, on to Ras Hotel which has changed drastically⁴: carpets on the floor, hot water, the tub drains, new curtains, polished hall floors w lots of wax, remodeled the bar. On the whole I don't think I like it much especially changing the bar; the old one had real personality. Street in front is finished; there is a dial system in town. US/AID had moved to the Embassy. Lots of changes and much building going on."

"Big hiatus here. Notes written much later."

[PN] grasses of w. tropical Africa, 1970 [This was part of the sidewise script mentioned above]

- 16X71 Rented VW & went around to see people, but nothing going on. Everything is moved & closed. "I saw Anderson of SIM. He was sorry but had done nothing⁵. A bust but got phone numbers to call Sunday night."
- "Up early for a beautiful drive to Ambo. A glorious day; noog in full flower, red tef, green wheat, blue sky, etc. Got to **Ambo** about 11:00. Wrote Phil Busey⁶; had a leisurely lunch & started back about 2:00 pm. Outside of town passed a crowd of people gathered about **an accident**. Presumably a pedestrian hit by a car. Proceeded slowly & was harassed a little by a car with people looking me over. I got the feeling that they were going to blow the whistle on me and sure enough when I got to Quinchi (sp?) about 35 km from Ambo a policeman stopped me. Two men got in and ordered me back to Ambo. I was in for a long session with police incompetence & stupidity. Finally cleared 31 hours after first seeing the accident." [PN: East Africa Ceren [??] Research Cent. Addis Ababa]
- 18X [JRH stopped putting the 71 in the date] "Spent night at Ras Hotel in **Ambo** & set off under guard early in a.m.⁸ Got off at Holetta and a policemen took the car in. Dr. Dognuchez⁹ loaned me an electric razor & I gave my speech extempore. It went O. K. & the meeting was interesting. I had to go in early to clear the car & after much waiting for Dr. Fadda¹⁰ got off. He did his best & we got into town about 4:00 pm. Hertz did not have the car, so I rushed to hotel, got travelers checks, rushed to bank, back to Hertz & Mr. Metha sent a boy with me to police. There we met my fellow victim:

BELAYNEH ALEMU

⁴ The last time Harlan was at the Ras Hotel was in December, 1969 (Exp. No. 7), 1 year & 10 months previously.

⁵ He may be referring to the Plant Germ Plasm Center he had tried to start last time (Nov. 1970).

⁶ Philip Busey was one of Harlan's graduate students at the U of I.

⁷ Harlan's experience in Ethiopia has certainly changed since his first visit in 1960. Then he was hosted around by faculty at the new Alemaya college, now he is by himself; but, he was there last year 1970.

⁸ the 31 hours don't quite work, unless he got in late that night or unless this is 19X71

⁹ See Exp # 8, Nov. 10.

¹⁰ See Exp # 8, Nov. 12.

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He was very nice throughout the whole thing. After a long wait we went to the police garage & found my car. But, before they would let him go, they had to inspect it, check his license (they had all day to do that). Finally back to police again & more questions & a new departion. I lost patience & asked the TAR man to call Fadda. Soon a deputy of Fadda's showed up & we felt better about it. Eventually a stupid document was drawn up & I signed it. Fadda's man guaranteed me or \$2,000 U. S. & we were let go. Got to hotel about 7:00, a whiskey, bath, shave & change of clothes & was taken to Fadda's cocktail party. I would gladly have skipped it by then, but it was nice & a few drinks helped. Talked at some length with Cox, an Agronomist fr. Malawi at alia [??].

- 19X Checked out, leaving the big bag, taking the smaller bag made it by bus to **Debre Zeit**. "The place hasn't changed a lot. Some plot work on Tef, but the Tef looked bad. "After lunch to **Awassa [Google: Hawassa, 224 km away]** & an evening program. "Papers by Cherhost & Darrah especially good. These guys are finally getting on the ball." **[Today, 2013, we find the Hawassa University and the Southern Agricultural Research Institute (SARI) and other agricultural programs centered around Awassa and Lake Awassa. Not sure what was there in 1971, but some kind of Ag research going on and Dr. Harlan was impressed, or was he impressed with their work toward a germplasm center?]**
- "Tour of Awassa Station, which is part of a large National Community Development Program.

 French Agronomist. The minister gave us a speech, etc. Things are moving here, too. Eventually to Nazareth and nice hotel w pool & all that." [Today (2013) there is an Awassa Agricultural Research Station as part of SARI. Again, all this is new.]
- "Toured the CADU Project. Agri. Devel. Unit, or something like that. Swedish supported.

 Fantastic change in the whole landscape. Converted to mechanized wheat farming. Yields high.

 Income good. Wheat imports no longer necessary but the tenants are evicted gone and nobody seems to know where. Swedes are sensitive to criticism on this point but rather insensitive to the problem. A radical change at any rate. Back to Addis late."
- 22X Up early & chartered flight to **Dire Dawa** to see Adumyan Long Program. Long day, no comments about the program. At the end of the day "Went out for wat & Injera." ¹¹
- 23X Chartered plane back to **Addis**. The people are now very polite and everything is working very well, "except for the nutty police".

India Phase (Oct 24-Nov 5; 13 days) [This was Harlan's third time to India. Others were Exp. 2 - 1960 & 4, 1966-67]

4

¹¹ Wat & Injera is the basic traditional Ethiopian meal. It basically stew & pancake.

- 24X Flight to **Bombay**. "Nothing new except the lights of Bombay coming in were exceptionally beautiful." He stayed at the Taj hotel. "It is being modernized air conditioning & all that & the character completely lost."
- 25X "Hiked about the shops with Steve Eberliant? & then moved to another hotel as the Taj would guarantee nothing. Sat out the heat¹² & ventured out a little..." "Bombay looks more like Detroit or Cincinnati every year. The old slums giving way to high rise & where the poor people go nobody knows or seems to care."
- "To Prince of Wales Museum, but they have changed things there too and it is not as good as before. Took PM flight to **Hyderabad**. Met at airport by Bill Young. Hotel short on rooms. So he had to share a room with Charley Jordon. "We got on fine."
- They were held captive by a program at the **Regional Research Lab** auditorium for several days, They have a very tight schedule of transport, meeting, tea, meetings, lunch, meetings, tea, meetings, dinner, then about 9 pm off to the club for drinks. Finished about 11:00 PM.
- 28X "do"
- 29X "do"
- "Program in morning & tour of Rajendrenager {?} Exp. Sta. Dinner with Shubhada & Mohan Naik, Lee House came too. Very nice, really.
- "Morning tour of town w the Naik's Gollomada? Fort, parks, zoo, etc. "Still no time off." Flight to **Delhi**; "met at airport & taken to Indian International Centre." Then he gives address for Mohan R. Naik, whom he mentioned in the 30X log.
- "Called Swaminathan¹³ to set up meeting for tomorrow even though it is a holiday. The Nebraska Team, Max Cligg, Chas Sullivan & Gerry Eatine (sp) wanted me to go shopping with them, as they had never been in India before." [So, now he is a shopping expert and they go around to some shops and buy stuff.]
- A car took him to IARI, visited with Jain (Head Genetics), Murtley & Swaminathan "over the world network problem. [BOTT NOTES UNCLEAR] I gave? ??? & left [NEXT PAGE:] some notes. We seemed generally in agreement that a clear-cut project should be written. We have done enough talking; now is past time to get on with it. Back to IIC for a late lunch. Hiked the Lodhi gardens in the eve & stuck out the two meal a day move (in fact no drinks either as I was out & these were 'dry days'. No doubt good for me.) Wrote a mess of letters & read more re Costa Rica. No business because of ?? holiday.

¹² Note: he complains about the new ac in the Taj and then when he goes to a different hotel, he sat out the heat.

¹³ M. S. Swaminathan A very important geneticist and leader of the Green Revolution in India. See https://en.wikipedia.org/wiki/M. S. Swaminathan.

"To Ghana High Commission and found out I could not get a Visa without a ticket, so on to U. S. Embassy & US/AID to see if any Illinois people about. As luck would have it the Thornes were in to Pick up the Claors, Budiweier & Bill Lundsman. I met them in office of R. R. Tenne & he invited us all to his house for dinner. Spent the day with Merle & Charolette (?) clear shopping. Merle took us to some fairly fancy places in shopping centers far from the wandering throng. Charolotte went ape over "old" things. These were earrings [?] & all that. Tried to get any flight except Pan Am & couldn't so got that confirmed & that's all the business for the day. Finally out to Staff House – a [BOTT] [facing page]had a visit with Marlowe over booze - the first in some days. In due time to Renne's & the usual. Nice house, nice dinner & all that, but unreal & out of it. Don't know if I could be a US/AID or not. Everyone seemed to be out of touch with reality."

[He seems to be in Delhi.]

- "Abandoned attempt to contact archaeologists & went downtown to finish shopping.

 Thoroughly jaded seen it all before fantastic amounts of stuff I don't want or have, annoyed by the money changers & beggars, short on temper; I can see why Merle shops in the shopping centers. Mostly a bust. Got some silk scarves & maybe, foolishly, a unmounted topaz, some jaingle bells I though sounded nice, finally fled to the Ambassador Hotel to escape the beggars. It is now remodeled, air conditioned, elegant, not much character & not the hotel I knew 11 years ago (1960). Norula's is still there & looks like it would be fun except for the human pests. Delhi has changed & so have I. It was irritating before & still is, but much of the fascination has gone. Long evening, again w/o dinner & reading Spanish ..." [BOTT].
- "Wandered the Lodhi Gardens¹⁴ more systematically **[than before 11 years ago]**. Met with several people, wrote letters, mainly to Ethiopia, did a seminar on Maize x Tripsacum hybrids. "Looks like I will be one of the 12 disciples to write the project. Maybe we can make some sense of it. Back to IIC to begin the vigil to start to airport at3:00 AM."

Back to Rome (Nov. 6 − 12; 6 days)

- Pan AM called 2:30 am. The plane is late. Went out at 4:30 & plane left at 7:00. Trouble is it was a 747 & nobody could handle it. They tried a "quick" transit at Toheran & instead of one hour, it took two. Just couldn't unload, load & service all that plane. So missed connection at Bieruth; mad affair at ticket wicket & finally got back on & went to Istanbu. Usual long wait for luggage & all that. Pan Am put us (7) up at Chenar Hotel in Yeshilkoy. I really enjoyed it. Hiked the village which is still charming despite new apartment houses. Some character still there. Bought small bottle of raki. Ate at yesi/koy¹⁵ on Sea of Marmara. A delightful eve.
- 7XI Flew to Rome. Room at the terminal.
- 8XI To FAO and a physical. "A lot of things set up for tomorrow."

¹⁴ The Lodhi Gardens are about the largest and most beautiful green spots in New Delhi. There are some outstanding Muslim tombs there and many local plants there which are labeled.

¹⁵ Could not find an existing restaurant with anything like this name. HVH2 3-13-17

- 9XI Raining like crazy. Went all over trying to get visas etc. for Africa part of trip, but were stymied at every turn.
- 10XI Raining like crazy. More embassy hopping. Got caught in a demonstration by farmers.
- 11XI Raining in sheets. Boring day. Read Jacquelyn Murray.
- 12XI Rain gone, but still chained to desk writing. Finally got off to **West Africa**.

Nigerian Phase (Nov. 13-19; 6 days)

- "Arrived < 2 hrs late & through a refreshingly easy customs. Got a message to go to "Queens's Drive by taxi. Did so. ca 2 hrs & £3 worth. It was UNDP & FAO office: In 20 min back on a bus towards airport & IITA guest house which reached 1 ½ hrs later. Could have saved >3 hrs if I had known. Anyway got a cold beer & zonked out 'til 6:00 pm. Met a Rob Williams down to meet his wife & daughter & after a beer went [BOTT] I treated ... [facing page:] plant pathologist & nice visit. [PN: "To Lagos"]
- 14XI Up & by 7:00 hiked to road & got S. arundinocem. This Williams & child Katherine appear, both of them smashing to say the least. By 8:00 off in IITA transport & arrived ca noon. The little girl a great traveler; she either slept or bubbled absolutely delightful. Saw Sar three times on way. Ablakunda (sp) but I think Chheda & I had collected it so let it go. To Dr. Albrecht's house to stay. (they say Univ. Rest House is full, but I doubt it,) Drinks, sandwiches & to see Chheda, eventually to 'the site' & swimming poor to Chheda's office. He is wound up & writing, finally, a bunch of papers, some fair & some junk. Some good ideas, some rehash of our work. Eventually saw Kanti (called here Hippy), hair longer than ever but he isn't having much luck redirecting ? the Nigerians as I had predicted. He may straighten out eventually. Anyway, good to see the Chhedas, ..." [Bott]. [PN "Ibadan"]
- "To University [of Ibadan] first & protocol visit w. Dean & Head of Dept. 16 Saw a little stuff Kanti is growing weed cowpe everywhere but, must have sunlight likes mowed roadside is a trailer that does not climb & when he ties it up on stake it does not flower. The wild one is found in deep forest, slender & climbs. The common cucurbit with the long stalked flower is Lufa 8 & the Talferia (sp) has huge ribbed [figure here, pear shaped with two ribs down the middle] shaped fruits. Spheno styles has long, slim pods & I got a couple, double as yam. Saw Thurstan Shaw good visit. He should have some of our publications. Also the Director

¹⁶ This may have been G. M. Edington, who did pioneering research in sickling and resistance to malaria at West Africa. He was acting as Vice Chancellor at UI in 1971. See his address at Foundations Day, Nov. 17, 1971: http://ui.edu.ng/content/1971-acting-vcs-address-foundtions-day.

¹⁷ A family of plants including the cucumber.

¹⁸ Luffa is a tropical cucumber. The fruit can be eaten or the fibrous stalk used as an abrasive "luffa sponge".

¹⁹ *Telfairia occidentalis* is a tropical vine grown in West Africa as a leaf vegetable and for its edible seeds. Common names for the plant include fluted gourd, fluted pumpkin, and ugu in the Igbo language.

²⁰ Thurstan Shaw was a preeminent archaeologist of Nigeria and Ghana in the 20th Century. Outstanding! See: http://www.telegraph.co.uk/news/obituaries/culture-obituaries/9964085/Professor-Thurstan-Shaw.html.

Armstrong – a linguist but interested in the ethnobotany. Maybe Kanti can work with him. Lunch & delivered to IITA Loy Crowder took us to Ken Rachie. Mostly pigeon pear & cowpea with interest in Soybeans & lima beans. Insects big problem but some are clean (limas & soybeans). Pigeonpea drops fruit & cowpea gets clewed up. He has a single crossing technique – a few seconds to emasculate. This done in eve & pollinate the next morning. Weed cowpea all over but Ken had never seen it. Swim & out to Crowalers for eve. [PN "Ibadan"]

'Full schedule at IITA. Gave Seminar at 11:00. Lunch at Mike Harrison²¹ is w. Ayo Abafarin²² (sp). Nice man & Jim Moomaw²³, rice agronomist (farming systems). Harrison may be wasting time on maize at Ibadan. Yields low, maize a minor crop. Lysine is either ample or thrown out with leach water Moomaw seems to be floundering, too. Abafarin has more clearcut objectives but the rice program cannot be very large there because of facilities. George Wilson (Jamaican) has interesting program on vegetables. Quarantine²⁴ is so bad that he can't get much in & so is looking at the local ones – maybe a good thing in this case. Lots and lots (Kanti says 75) leafy vegetables, some very interesting. Final tour w Dr. Hahn, a Korean yams & cassava & sweet potato. Has picked up Manihot gluziovi (sp) a tree cassava w/o tubers & introduced one as a rubber plant. Some clones are free of the "viruses" & it will cross w. cassava. Maybe he can do something spectacular here & maybe not. Looks encouraging. The Quarantine holding him down too. Hahn has only been there 6 months & looks like an operator. The eve. at Chheda's with some 24 people. Big party & v. nice. Visited with the Millers (OSU Ag. Econ.) [BOTT] [PN "Ibadan"]

"Toured with Chheda & Kanti; saw the weed cowpea & a bush garden – mostly Xanthosoma²⁵, banana, maize, a little local yam, probably volunteer. Looked bad probably due to Ramadan. Kanti seems to be learning quite a lot of ethnobotony & the cultivated plants of the area. Finally flight to Kaduna & met by George York, who was leaving the next day for the Andes, but put me up (nicely as usual). [PN "Samaru"]

"Lloyd Tatum came & we went to the University, but no use. Ramadan celebration one day early & nobody. Andrews & King out. Director & vice director out. Finally went to Shika & saw Peter De Leuuw, but nothing added... One new P. violorem located & that is all. Late in aft. went collecting. Got some shattercanes & maybe a little perennial rice. Nothing much but did exercise. In eve. to Tatum with Carl & (Muriel?) Stockinger; v. pleasant. [PN "Samaru"]

²¹ Michael N. Harrison joined IITA in 1970 as a Maize breeder.

²² Online: book "From farm to fame: revealing the secrets of Dr. Abifarin's success: a biography", by Ayodele A. Abifarin., Ayo O. Abifarin joined the IITA and worked as a rice breeder until 1978.

²³ Worked with IITA in the early 1970's; probably leader of the Farming Systems Program of IITA in 1971. See: "Sustainable Food Production in Sub-Saharan Africa" IITA, 1992, page 14

²⁴ I could not find anything about a quarantine in Nigeria in 1971 (HVH, 2-20-17)

²⁵ Elephant ear

Lloyd came after breakfast and we went slowly to Kaduna, collected here and there S. of town along the bottom we found S. vert, saw O longistamenata in upland fields, suggesting they are pretty wet & found one field of O. glaberina. Plane was 3 hrs late so he left me at the Hamdala Hotel where I passed the time over a couple of beers. When it was time to go no taxi anywhere. Celebration. So managed to get suitcase, attaché case, collecting sac & 2 men on a Vespa & rode to airport. Fun but dangerous. Flight otherwise uneventful and a driver from IITA met me & took me to the rest house where I shared a room w. Dr. Kemp (RF, Vet Med). [PN "Lagos, Chheda wants short bags & seeds of all Tripsacum."]

Ghana (Nov. 20-24; 4 days)

To airport extra early because of Kemp's plane & clearance the best I have had in Nigeria. Short flight to Accra & no hotel rooms. After several attempts to phone at Star Hotel, went to FAO/UN and met a Mr. Coombes, who made numerous calls on my behalf & finally arranged 1) a double room at Washington Hotel 2) a ticket Ghana Airways to Kumasi tomorrow, 3) a reservation at City Hotel Kumasi, 4) a driver to get 2 & 1 above. [PN "to Accra"] [End of travel notebook 9a]

[in Ghana, from Pocket Notebook (PN)]

Nov. 21 [PN "to Kumasi"]

Nov. 22 [PN "Kumasi"]

Nov. 23 [PN "to Tamale"]

Nov. 24 [PN "to Accra"]

Ivory Coast (Nov. 25-27; 2 days)

Nov. 25 [PN "to Abadjan"]

Nov. 26 [PN "Abadjan Adipodoune"

Send seeds of Teocintle & reprints to Pernes & Co."]

Nov. 27 [PN "Bouake

Keil peanut Co. NY Raleigh grown 'Pois d'Angole'26 in Upper Volta. Ask about it Voondzu27."]

Nov. 29 [PN Ouagadougou²⁸]

²⁶ Pigeon pea

²⁷ VOANDZOU, Vigna subterrunea aka Bambara peas (from THE VOANDZOU: A complete food totally ignored?)

Nov. 30 [PN OUAGA. Pou A.. // Robled]

Saturday Nov. 4 [PN Bamako]

Senegal (Dec. 11-...)

Dec. 11 [PN "Dakar"]

Dec. 15 Wednesday [PN N. Y.]

Dec. 26 Sunday [PN Pass w. Mex D. F. rd to Toluca 3100M. The rest of the pocket notebook for 1971 has quite few notes in it, but I will not transcribe them]

THE MEXICAN LEG IS MISSING. HE MAY HAVE MET JEAN SOMEWHERE FOR A FEW DAYS AND THEN DID SOME TEOCINTLE COLLECTING. SEE LETTER TO GEORGE BEADLE, JAN. 12, 1972 (U/I # 55). It begins:

"Dear George,

January 12, 1972

I finally got back last week and found your letter of 21 December on my desk. I had gone to Mexico directly from Africa but took a little vacation with my wife before looking for teocintle...Nevertheless, I spent one glorious New Years day doing what I suppose I most like to do. The weather was perfect, the scenery glorious and luminous and I spent the day bouncing down a rough gravel road from Morelia to Huetamo and finally out to Iguala²⁹. The teocinte was over-mature but enormously abundant and I could still get a few samples."

"I also spent two afternoons at the Paleobotany Museum and looked at the early maize. I don't know what they have at Harvard, but the early Tehuacan material is very badly labeled...Personally, I think teocently was thee from the start and remained until very late. There are no negative materials from san Marcos cave that look like teocintle to me and rather typical teocintoid cobs as late as Venta Salada – small, square, deep cupules, hard flaring glumes and all that. There is certainly noting in Mexico incompatible with the idea that maize evolved directly from teocintle.

"Now, if what is in Mexico is the leftovers (and I get that impression, too, comparing what I saw with published photographs) it becomes very important for us to take a look at Harvard. Having just seen the Mexican collection I think I can make a reasonable comparison. If Mangelsdorf has really cheated the Mexicans in sharing the materials, it is a really serious offense and would jeopardize future archaeological work in Mexico. This would have to be approached cautiously. Of course, I have no idea what agreements THIS IS THE END OF PAGE 1, I AM TRYING TO GET A COPY OF PAGE 2 FROM CHANCE R. 9-17-18"

[Getting home the week before Jan. 12, 1972 supports the idea that his Exp. #9 ended Dec. 31 & not 21.]

²⁸ Ouagadougou is the capital of Burkina Faso (former Upper Volta.) The name is often shortened to Ouaga (from Wikipedia)

²⁹ Total distance traveled approximately 350 km in a north to south direction west of Mexico City.

[Meeting notes entered in a second notebook, but seem to be on meetings on above trip (#9). The notes seem to be organized in reverse order, beginning with the last page]

[First page, PAGE 42]

ADANSI interview. Doku Univ. of Ghana. Worked on cowpea / Psophocarpus esp. Work "KARIKARI" wild & cult limited scale. Winded bean – needs worker not used much Ghana J. Agric. Sci. late article.

[facing page, PAGE 41: blank]

[PAGE 40; notes added at top of page:]

M. K. Akposoe – Maize breeder Kumasi

Kenef (wild) – rosette, jute

S. Y. AMANQUAH - Filenes crops [end of added notes]

The picture shaping up in Ghana:

- 1) Sorghum & millet mostly in northern 2 provinces
- 2) San is in Kumasi, at least
- 3) O. gl is grown & Quanzah has a collection
- 4) Cowpea widely grown, but mostly in the northern 2 provinces
- 5) They "think" they have seen wild cowpea
- 6) Voandzeia³⁰ grown on >70,000 acres in Upper Region & a little elsewhere.
- 7) A K. A. Hazel works on Voandzeia at U of Ghana, Lagos.
- 8) Kenaf³¹ may have wild forms & possibly H. sabdariffa³²
- 9) Oil palm may need collecting. See Adonsi.

Outline of Report to FAO:

Sorghum: spontaneous races (Maps)

Cult races (Maps)

P. millet: Spontaneous races (Maps)

Cult races

Afr. rice: Spontaneous races (Maps)

Cult. Races (Maps)

³⁰ Bambara groundnut

⁻

³¹ The Kenaf plant is used as a source of fiber for making paper. It is better than pine trees.

³² Hibiscus plant used to make Roselle or sour tea which has some medical benefits.

Cowpea: Spontaneous races (Maps)

[PAGE 39]

Tamale: pattern is maize early crop interplanted w. sorghym & late millet. In Upper Region Early millet takes place of maize – cowpea also interplanted. Cultivator yields 600 bls station yields 1200 on tall sorgh. A large array of guineas, a few GC & even & even a late D also B & B* membr. A rat-tailed B! blue seeded & very unusual, Mercer-Quashie trying to get short types, doesn't look like he has gotten very far, but just starting. Andrew intro looks good & a short one fr. Sénégal. GC Andrews somehow somewhat resisted to midge. No wild sorghum known in the region. The millets do not have shatter types that they know of & no shattecanes in evidence. The rice mostly satina but fields badly contaminated w. glabberima. O. longistamminata is common. No wild cowpea known to them, but wild kenaf thought to be present Bambara gu. Grown mostly in Upper Region. Pop. mer. Toward U. V. & also greater in soutnern.

[PAGE 38- three publication references]

Giessen, J. E. W. W. Hoffman & Schlottenuhoker

Die greaten Athiopiers und Erythaos

A. F. Pflanzenzüchtung 35: 377-440 (1956)

Maignien, R. 1966 "Review of research on laterites"

Natural Resources Research IV

UNESCO Place de Fontenoy Paris 7e

Printed by Varillant-Carmarume, Liege, pp 148

Dr. Bhup D. Bhardwaj / FAO Regional Office, Cairo, UAR

[PAGE 37: note at top of page] "3 production agronomists needed"

IITA³³: goals = incr. quantity & quality of food in humid tropics

- 1) Farming systems
- 2) Crops
 - a. cereals (maize & rice)
 - b. Grain legumes, cowpea soybean
 - c. root & timber, cassava +, yams, vegetables, sweet potato

³³ IITA is the International Institute of Tropical Agriculture. From Wikipedia: "IITA was established in 1967 in Ibadan, the idea of the institute came from Ford and Rockefeller foundations desire to establish a centre for the improvement in quality of tropical foods. The IITA joined the CGIAR consortium in 1971."

Report on the systematic collection of Soybeans, Millets and Maize in India

K. O. Rachie, R. F. New Delhi

Interview at Crops Res. Inst. Kumasi

S. H. Evelyn - Everything

there is cold storage at Kumasi

Voandzeia, 71,000 aces in Upper Region, little elsewhere.

- K. A. Hazel Univ. of Ghana, Lagos works on Voandzeia.
- J. Quanzah Rice breeder & had O. globerimma
- H. Mercer Quarshie Sorghum at Nyankpala

Voandzeria grown in Zambia, Molarvis

Lots of cowpea in Ghana – largest grain legume [BOTT]

[PAGE 36; added to top of page]

* If grain size is markedly increased when head size is reduced by clipping; it shows the normal head is not limited, but CHO supply is. If there is no incr. in seed size, then head size is limiting. This is borne out by leaf clipping to reduce CHO supply. Where head size is limiting, there is less effect.

...size of sorghum heads. The head must be large enough that the photosynthates can be stored in it, but an overly large head may compete with the plant for carbohydrates. A test is made by cutting the head in half & measuring the increase in seed size. This ranges from 0 to 80% by variety and the most productive vars. are in the intermediate range. The test has some possibilities although I think his theory is weak.

[Different presentations indicated w. #]

LeRoy Peters described his program & paper is attached.

Hugh Doggett said a little about his populations at Serere. The most rapid and consistent progress from an artificially produced population was achieved by S, testing. Then said a bit about the Hyland Crops Rec. Inst. – see cryptic comments few pages back re: World Banks. Dean Melak³⁴ was very bitter about it "going" to India instead of Africa.

I skipped as much of the business meeting as I could: the amenities endured beyond endurance but it was finally [over. BOTT pg 36]

 $^{^{34}}$ Dr. Melak Mengesha was dean of School of Agriculture at Alamara Univ. Dira Dawa, Ethiopia. See Exp # 2, Dec. 30, 31; Exp # 8, Nov. 10

[facing page]

Sorghums at Alemaya were impressive! Little insect and bird damage; clean plants large heads; it all looked extremely good indeed.

The main outcome for me was a possible strategy for collecting in Tanzania & elsewhere & some contacts that might work to carry it out. Notable: Dr. Judy: Gerry Channer.

Notes on people on attached list of participants.

Max Clegg. -

Chas. Sullivan – Nebraska team on sorghum physiology [these three]

Gerry Eatin -

// Murray, Jacqueline 1970 The First European Agriculture, a study of the Osteological and Botanical evidence until 2000 BC. Aldine Publ. Co,. pp 380 [BOTT pg 35]

[Follows are two pages of notes, which I will not transcribe at this time (3-11-17)]

Oct. 18 – 23

FOURTH EASTERN AFRICAN CEREAL RESEARCH CONFERENCE

Minister of Agre, not there but Minister of National Community Development was present & for several days spoke French.

Felix Auto [Ethiopia] [I will forgo the detailed notes, but just list the names.]

R. A. J. Cox [Malawi]

William H Judy (Dr.) [Tanganyka]

Mr. M. W. Oggemen [Kenya]

#Ato Aewdu Oumer [Debra Zeit, Ethiopia]

Mr. R deRauw [Njoro station]

Dr. Steven A. Eberhart a real dandy paper that I seem to have left behind somehow. The essence is contained in: EBERHART, S. A., M. N. HARRISON, and F. OBADA 1967 A Comprehensive breeding system Der Züchter 37:169-174.

[next page]

Possibilities to disces w. R. F.

1. Le roy Peters – an excursion across N. Congo \$600 ? (My money?)

- 2. A student practical for Ato Amare \$1,000 per year for 3 years?
- 3. An EAAFRO collection of Tanzania (& Kenya?) with Gerry Channer as one leader \$4,000.

[facing page]

World Bank (organize) Canrultetrue group (>21 Donors)

Technical Adisory Committee (selects projects)

M. Sauger, Ralph Cummings, Hugh Doggett team for Dryland Crops Institute

Acres (or ha?) sorghum & millet (at least relatives)

India $37,767 \times 10^3$

Africa $27,627 \times 10^3$

(Nigeria 12,200)

(Ethiopia 3,600)

[TWO MORE PAGES OF NOTES I WILL NOT TRANSCRIBE]

[TWO MORE PAGES OF NOTES, BEGINNING WITH "Brachioria cont:", CONTAINING A WHOLE LOT OF NAMES SEPARATED BY /NAME/. NOT AT ALL SURE WHAT ALL THIS IS. WILL NOT TRANSCRIBE, 3/11/17]

[TWO MORE PAGES OF NOTES SIMILAR TO THE ABOVE, SEEMINGLY ABOUT VARIOUS PLANTS.]

[DITTO FOR TWO MORE PAGES]

[ANOTHER PAGE OF ABOUT PEOPLE, PLANTS AND PUBLICATIONS]

[facing page]

Brussels Notes 11X71 [PAGE 19]

SORGHUM

2 labelled S. <u>aeth</u>. Both wrong / S. <u>arundinneeum</u> [THESE APPEAR TO BE NOTES TAKEN FROM A HERBARIUM IN BRUSSELS AND ARE VERY TECHNICAL. I WILL NOT ATTEMPT TO TRANSCRIBE THEM NOW, 3-11-17]

[PAGE 18 – THESE NOTES ARE MORE LIKE HARLAN'S THOUGHTS ON VARIOUS THINGS]

Some of the specimens look like coracana, but they shatter! Some specimens look rather like large E. Africana but do NOT shatter!

E. <u>plocifolia</u> is probably what I have been calling E. <u>gaegeri</u> – basket material in Ethiopia. Ethiopia (incl. Eritrea), Somalia, Kenya.

The situation for ragi seems fairly clear. E. india sp Africana is very much at home from Ethiopia to southern Sudan & southward through Uganda, Kenya, Tanzania, Zambia Rhodesia & down to South Africa. It is wild with weedy tendencies & can be a roadside weed or weed in coffee plantations, etc. In Uganda, at least, it is a weed in ragi fields where it intercrosses w. E. corouana & produces shatter types. The pattern is wild; wild-weed; weed; cult. As in many cereals. Ugand-Ethiopian origin still most likely. India does not have the tetraploid. There is some widely scattered introgression between weed **[BOTT]**

[PAGE 17]

D/Farugi says there is wild guar in Karachi region – also genuine wild gosayjium herbaceum a perennial w. spinable limb & grown in Bolucheston for camel fodder. /

E. intermedia Kenya & So Ethiopia related to E. floicrfolia – strong perennial – more racemes larger ones, more robust plant than E. florcifolia (hmy [?] e. glorgesis). E. int & E. flosc. Introgress.