In the introduction to the log summary for his first expedition to Colombia in 1974 we see the image of a true Plant Explorer slogging through the dense jungles in search of a rare & illusive plant specimen that would help solve the age-old Maize puzzle. He returns three years later, on the 200th anniversary of Mutis' recording of the novel (can we say exotic) Maize-like plant his friend brought him from a walk in Ibague', Colombia. At this point (April 22, 2019) this journal needs a great deal of transcription work. I feel like I really don't have time to finish it before the book has to be submitted. There are a number of very lengthy writings on several of the day's notes. So, I am going to hold off on trying to finish this. HVH2

- August 5, 1977 Jack Harlan is catching a plane to Chicago and grumbling about all the family things he had to do, like clearing out Sue Oglevee's appt. and taking Mildred to hospital. He never got a rest from the last expedition in Jordan. Flew Chicago to Miami to Medellin to Cali, Colombia.
- Aug 6 Went straight to library, exhausted. Following are notes from library: several publications.
- Aug 7 Called the Grobermans,

Next page (my page (mp) 34) more notes from library.

- Aug 8 Met a few people who might be able to help him while in Colombia (for month of August.) Not sure where he stayed. No hotel available in Cali. Anyway someone from CIAT took him out that night.
- Aug 9 Up at 5:30. Took CIAT car to Palacio del Governmericon and met a bunch of young people. They all set out down the Dagua valley where they met some porters. "the plan was to walk 3 hours to another river where there was a boat to go down to the sea and over to B'ventura. Sounded great ..." Now, he describes the ordeal of not being able to keep up with the porters and finally having to come back and let them go on. THIS IS REALLY GOOD. A LONG DESCRIPTION OF THE TREK THROUGH THE JUNGLE AND BACK, EXHAUSTED.
- Aug 10 Made one excursion out in a dugout canoe fitted with a motor, saw a few things, but the motor was giving them trouble and they returned. Not a very fruitful day. He notes: "Essentially nothing collected other than a dab of chococito & one lot of Xantoroma (?)." So, now he knows where he can find more of this stuff. "Chococito does not look tripsocoid, but maybe we can learn something by studying it alone." Chococito seems to be chococito maize which is growing wild (?) in that area.
- Aug 11 Got settled in a hotel in Beunaventura, after a long series of waits and hiking all over; "Zonked out exhausted & legs hurting"

- Aug 12 Not sure where he was when he did this, but got his luggage and loafed, met with Alex Groberman. Caught a bus to Aristi and made arrangement for the next day. Seems to be in the Intercontinental Hotel.
- Aug 13 Hiked all over town looking for the Archeological Museum, which was advertized in the Tourist Map. Finally found the Natural History Museum and realized that "there really was no Archeology Museum and this was it." After hiking all over 'til his feet were sore and his legs tired, he picked up the rental car and drove it "to parking building across from Aristi" WHAT IS ARISTI?
- AUG 14 Up in the cold and rain, drove along and spotting Tripsacum all along the road, starting at about 33 km out. Nothing in seed yet. Scenery beautiful and a nice trip but not much to show for it. Called Jean OK.
- Aug 15 This was a holiday but they had some kind of fair. He went too early and again too late to see the conventional booths. The communists were there early and stayed late. Got nap and to bed early, too.
- Aug 16 Packed up his stuff, had visit with Patrino who showed him where Tripsacum could be found. Went back to hotel and checked out. "This trip not very productive, I'm afraid." Went to CIAT Library and took notes: lists publications and his evaluation of them. Then notes on an Interview with Dr. James H. Cock (mp 40): he is talking about cassava and soil needs, problems in poor countries and exceptions, "going to town" (I DON'T KNOW IF HE IS GOING TO TOWN OR THIS IS SOMETHING COCK SAID) then he has these words in CAPS: KAZUD KAWANO the breeder, and all that I have underlined, he had circled. And then he continues with his notes from the Cock interview (I think, because he is talking about production) on mp 41 he continues "what are controls over partitioning beoniase (?) between tap & root? Daylength ... using cassava, rice & wheat" (this is still Cock) CALL ALL THIS TECH TALK (mp 40-42)
- Aug 18 "Killed at CIAT, dragged the town, repacked and left "XS luggage" (does XS mean except or what?)
- Aug 19 Flew to Medellin with Schultze-Kroft. Drove around with driver looking at legumes.
- Aug 20 ditto. He describes some of the crops he is seeing. "Coasted on into Quibdo in aft. & found a hotel! How different from 1974!" (WE HAVE NO EXP IN 1974. MAYBE HE HAD SOME KIND OF MEETING THERE THEN). Then he mentions "chococito". He describes what he saw of this plant on mp 43.
- Aug 21 On this date he drives, in a leisurely way to Isruina, Colombia. Google Earth has this drive as a 9 hour drive through the mountains to the western rainy side, so I don't know if I have this name right. He gives these conclusions: "Tripsacum does not grow in the forest...we have a

- pretty good collection of chococito (maise) ... also Xanthocanna, which seems to thrive around settlements but not in the forest." Looked up Xanthocanna and got Xanthomonas, which is a cassava bacterial blight in Colombia. Don't know if I am reading this right.
- Aug 22 To market first. He says something about Xanthocanna? "Rainer (first I heard on him) took some pictures for me". Flew CD-3, low over the jungle, to Condoto. Then he drove over the mountain to Cali and to CIAT. He spreads out and dries his specimens and makes a note about the unusual Maize. Then there follows on page 44-46 a Spanish lesson. He is teaching himself Spanish.
- Aug 23 Delivered a seminar (wanted to do it in Spanish, but they provided an interpreter and he went ahead that way). It went well. The rest of the day not much to do and he laments about using the Center's car, which was always breaking down, and not just renting one. "Hope I learn the lesson someday. So, another day in the pen."
- Aug 24 Went to the library and started learning Spanish. Some chatter about the car.
- Aug 25 Got a car with driver and went off "in direction of Popaynas", then Inza & La Plata. At one point he is scrambling up a slope to get a specimen and he "got into a next of 'horannjas bravos' (a type of ant). My legs were on fire immediately and it got no better for 3 days. Any way the stands impressive ..." The last part of this entry he says: "Some manifasciones going on and riot troops and w/ plastic masks, shield, batons, etc. No trouble apparently."
- Aug 26 Ant bites gave him little sleep. Drove to Ibague'. "Finally drove to Raul Echeverria's house (is this Teresita's uncle?) had chat, then a bus to Botota' & Jamie took off to CIAT. Not much to show for the trip but a better idea of Tripsicum in Colombia. Went to a lower level motel, the worst night for the ant bites.
- Aug 27 Spent the day nursing the ant bites.
- Aug 28 This is an absolutely wonderful-amazing mis-adventure that you have to just read for yourself.

 Any way he made it through.
- Aug 29 "A small sequel" with the car. Must read.
- Aug 30 So he flies out of there to (DF) [Dallas Fort-worth? No. Mexico City] And gives us a long litany of airport woes.
- The next half page (mp 53) is "Notes of Tlaltigapem (?) Randolph-Gutierrez No's" some numbers with comments, possibly having to do with Maize classification?
- Aug 31 "A comedy of errors." He really got nothing done. Is he now in Tegucigalpa?

(Kanti's effort to transcribe this section:) A comedy of errors. Called CIMMYT about 8:20. James, Sprague, Johnson, Hanson, everyone out except Keith Findley. He arranged a car to take me to Tlaltizapán where Jackie James was working this day. Nearly 11 before driver came but we got there just before 1 pm. She had received phone call in am and left. So, took 1 ½ hours to look at nursery and we went back arriving just after 5:00 pm. The phone for Jackie was garbled and was probably about . Anyway the day not entirely lost and nice ride. Got room in dorm.

As to Tr. (Tripsacum –K) nurseries: the old one not uses, plowed up soil problems I corrected and new material put in as intensive crossing block, nearly all T. da (Tripsacum dactyloides –K) and few T. ma (T. manisuroides-K). The old "new" nursery much as it was with plants now vey large- heavy in T.da (Tripsacum dactyloides –K) but some T. zop (T. zopilotense-K), T. pi (T. pilosum-K), T. an (T. andersonii-K), possibly T. lat (T. latifolium-K) a number of giants doing well and T. da (Tripsacum dactyloides –K) and few T. ma (T. manisuroides-K). The old "new" nursery much as it was with plants now very large. Then there is a "nuevo nuevo" with a lot of coix and bare places and a few other things. Most plants not flowering but rather thrifty compared to 1973. Notes preceding pages.

Sep 1 Tech Talk to right hand side of mp 55. "Harvested maize ears pollinated with sorghum.." More Tech Talk.

(Kanti's effort) Jackie James hired. To see what alien germplasm could be used. Maize-Sorghum primary emphasis at the start. CIMMYT committed for only 2 years. S X M (Sorghum x Maize-K) a few seeds that produce floret-like growth. On callus of (M x S) gave 30 chromosomes looked like 10S + 20M . Kato checked one that showed knobs on larger one and none on smaller- lots of small roots that died promptly. Some with 24, 22 etc. but a few with 30 including 10 small ones. Plant did flower but by then few or none of the small chromosome ones. Terminal $\mathcal{S}_{\mathbb{R}}$ (bisexual- combined symbol- K) and later 4 small cobs. BC to maize gave a few seeds. BC1 11 plants, S (Sorghum- K) seems to be eliminated. 11 more hybrids produced only one fertile. Some gave bulbils, most die but not all. Mario's crosses of "10,000" hybrid seeds, ca. half germinated and these yielded 7 hybrids. What were those that did not germinate ??- anyway went into "tissue culture" on big scale. 18000 crosses with help yielded 9+2? Hybrids, maize x sorghum. Many crosses with pearl millet, led nowhere. Interplanted Tr. (Tripsacum -K) nursery with maize and sorghum used as $\mathbb{Q}_{\mathbb{Q}}$ - Tripsacum as pollinator. From Mario's 7 plants tested for fall army worm resistance. Young larvae do not feed on Tripsacum. A

EXPEDITION # 14, 1977: COLOMBIA (August 5-28, 1977) JRH is 60 years old. This is his last real exploration.

few of Mario's hybrids were also resistant. Some Trs (Tripsacum -K) were resistant others were not. The whole Tr. (Tripsacum -K) collection tested for

I can't read the last line here-- Kanti

Sep 2 "Mostly loose ends. Nice visit w/ Norm Barland (Bourlog?) and another with Keith Fiindley. Keith indicated that CIMMYT was at a stage it would have to decide whether to continue work on alien germplasm or not., etc." Later "All set for the eve & tomorrow, I hope."

The rest of this Notebook has different dating format: 25VIII, etc. and appears to be technical notes on specific days.