

Jack R. Harlan Expedition No. 4: Nov 8, 1966 – March 28, 1967
East Asia & India to see U of I Projects

Expedition No. 4: East Asia and India (Nov. 8 1966 to March 28, 1967)

Note: This is listed amongst the Expeditions, because Harlan did some collecting (See Nov. 22 & Dec. 22 & 23), but it really is, for the most part, a Trip. Much of the journal copy that I have to work with is very difficult to decipher and it not very exciting, mainly meetings and such. He did not go out into the countryside collecting; however, he visited the KEW and herbariums in Paris and Berlin on the way back so it may be that he had collected some *Cynodon*, at least, and was trying to identify it. Since this is not a real expedition I did not feel that I had the time to transcribe everything. So, many days have short summaries of the activities. Some days Harlan went into a detailed description of the technicalities of what he was seeing. I felt that it would not be good for me to try to transcribe these entries. I called them “tech talk”. Jack Harlan’s student Kanti Rawal, now retired in California has volunteered to help with the “tech talk” sections.

Note that in making this trip/expedition Harlan flew from Champaign/Urbana to Stillwater, met with some of his old co-workers at OSU, then flew to Hawaii, then the Philippines and Thailand before arriving at India. In the correspondence leading up to his departure these extra stops were called “stopoffs” and funding for them was something of a problem. Harlan’s primary funding was from the “Midwest Universities Consortium for International Activities (MUCIA, established 1964)”. He was to be the University of Illinois’ first recipient of MUCIA funding. There was much dispute over the stopoffs and even over the trip itself. Evidently, the U of I Agronomy Department had a stipulation that a new professor, such as Dr. Harlan, would have to spent two years overseas. They ended up making a special exception for Harlan and went on to approve several stopoffs: The first to Hawaii to study pineapple.

Nov 7, 1966 Met with Agron. Dept, Stillwater. (PN)

Nov 8 “Stan Musgrave & Jim Brooks came out to see me off. Very nice.” With many delays he flew to **Honolulu**, found cheap room with roaches.

Nov 9 “Walked to Univ. met Jim Brewbaker, Larry Snyder, C. P. Wilson, Jim Bob Smith, who flew us over pineapple fields. Met M. Upadhyya, James c. Gilbert, & many I can’t remember. Went to Sigma XI dinner meeting, met more people, topic was archeology.”

Nov 10 Discussion about electrophoresis and other topics. Met more people. Was taken to top of mountain and back. “A good day.”

Nov 11 Veterans Day – holiday, Jim Brewbaker let him into the herbarium, where he recorded all kinds of stuff. He then goes on with some **Tech. Talk** about the grasses of the Pacific. Saw grasses in a vacant lot, went with Jim to Koko point, met Jim’s kids.

Nov 12 Flew to **Manila**. Pan Am seemed disoriented and lost his suitcase, but they treated him really nice after that.

Nov 13 [at top of page] “There is no Nov. 13, 1966”. [This may be because he crossed over the International Date Line in the night flight from Honolulu to Manila.] Pedro G. Banzon, administratie

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assistant of IRRI. He did all he could & put me in a car for Las Banos. Lovely staff housing area, gorgeous guest house, etc. I showered & called for Ben Jackson who came over & we went to headquarters. Saw people apposite, had lunch w the Jacksons & after went to the Agric. College, Botany Dept. & looked at grasses w. Dr. Panchio. Not much there. About 3:00 pm began to realize it was 37 hours since I had really slept, so went to guest house & sacked out. Roy Crowder & Ben called towards 6:00 & on the way to Ben's door a drink ran into Bob Pickett. Good visit, but called it short & sacked out by 9:00. Good sleep.

Nov 15, 1966

// Rice genetics and cytogenetics- get copy & mail home.

// New Rockefeller Inst. to be at Palmira, Colombia.

// T. T. Chang – Rice questions & our lodging a dwarf out of irradiated material has beautiful lower nodes & much leaf-sheath, wrapping and good lodging resistance. Round internodes better than oval. Leaf sheath wrapping and vascular bundle distribution important.

Dr. Oka O. peremis w. 4 geographic recalled Asia, Africa, America, & Australia when African is crossed w. all others and sation the young F1 embryo deteriorates (v, low fertility) also as considerable F1 weakness in these combos. Similar arrangement between O. ?? vs O. *glaberrima*, but, these F1's are fertile. F1 sterility in Peren?? – Set?? & specifically in any combo with American O. ??

Nov 16 [transcription by Kanti Rawal] - **Drs. Ou and Ling**

Discussion #1 Blast (fungus) *Piricularia oryzae*

Discussion #2 Bacterial blight tropical races especially virulent and varieties especially susceptible - seedling kill as well as leaf blight, very destructive, degrees of virulence, *Xanthomonas*.

Discussion #3 Virus - at least 4 of them 1 yellows, tumor orange leaf, grassy stunt. People refuse to believe the virus story and think it is soil and physiological. No virologist in India on rice. Leafhopper transmission for all of the viruses and all leaf hopper transmitted viruses require the insect (except beet curly top at very low frequency).

Pathak – Entomologist

Yoshida- Plant density arrangements. Two lane, one lane, Zigzag way and square. At high density and high N₂- lane is the best and 2-lane zigzag is probably the best.

IR 8 efficiency produces 200 gms/ m² / week or 300-350 cal/ day/ m² of solar radiation in rainy season and after flowering 300 x 10⁴ x 5 = 10 tons/ha. Peta only 150 x 10⁴ x

5= 7.5 tons/ha, actually because CGR peak comes early & it yields only 3-4 tons/ha.
 (Crop Growth Rate = CGR)

Most native varieties are day length sensitive so if you plant in May, June, July, August it all ripens in November. So you need insensitive types for quick turnover.

Corrected Names	Dr. S.H. Ou	Plant Pathologist
	Dr. K. C. Ling	Plant Pathologist
	Dr. M.D. Pathak	Entomologist
	Dr. S. Yoshida	Plant Physiologist
	Dr. B. S. Vergara	Plant Physiologist
	Dr. S. K. de Dutta	Agronomist
	Dr. Jim Moomaw	Agronomist

Blast= *Piricularia oryzae*

Discussion on viruses most enlightening, some diseases known for 100 years and thought to be physiological.- really virus.

Pathak showed work on leaf hopper and stem borer, granular lindane 2-3 applications per crop very effective. Some resistance in some varieties. Other insecticides being tested.

Yoshida- Spacing experiments with 3 densities of hills/m² and 2 varieties and 0 and 100 lbs of N. Those designs that bring seedlings to early competition the best.

0 0	0 0	0	0		
0 0	0 0	0	0		
0 0	0 0	0	0	0	0
0 0	0 0	0	0	0	0
0 0	0 0	0	0	0	0
0 0	0 0	0	0	0	0
2 Lane Avenue	1 Lane Avenue	Square			

Vergara works on day length and sensitivity; little trucks wheeled into dark air conditioned with low intensity supplemental light to give delayed day lengths without changing total radiation much.

De Dutta showed N response curves of various varieties and as expected, but good work. Moomaw other studies climatology, radiation etc.

The whole pattern seems consistent in that natural selection has developed a tropical rice to conditions of low yield. Everything works against the better plant type. Could this apply to wheat and Sorghum?

In afternoon Loy Crowder, Bob Pickett, Ely Bardenas, Miguel? Javier and Pete? Rosales and I were supposed to look at grasses. It rained all afternoon and we drove around the mountain to San Pedro trying to find a dry spot. No luck. The S. halapense seems to be a local type. Saw lots of copra production and lot of houses in tropical setting but little else.

Bob left in eve. and I went to the Crowders. After supper we talked foreign programs. His thinking is farther along than mine. The gist is that we should be training people, not doing the work for them. This is better done by sending good students to the U.S. for course work and returning them for research. The prof. comes along for a short term and may return from time to time. The long tour of duty is generally wasteful. Could be. Haven't thought it through, yet.

[In the Margin:] Suggestions for Stebbins

Dr. Delores Ramirez (Minn. - Purdue) Biochemical Genetics, College of Agric. Los Banos.

Dr. Marcos R. Vega , Weed Control College of Agric. Los Banos.

Dr. Juan V. Pancho Cornell - Taxonomy , Botany Dept College of Agric. Los Banos.

Thursday Nov. 17 [transcription by Kanti Rawal]

To Manila with Ely Bardenas and Dr. Pancho – stopped first at Bay View and saw Dale Weibel. Set up lunch; then to Manila Hotel. Mr. Banzon was out to Airport and nothing known about flights. To National Museum and Herbarium. Cynodon generally small tropical weed widespread in P.I.- one looked like it could be diploid, 2 looked like C. arcuatus but one of these from Orissa, India. 2 specimens from Belgian Congo that looked like C. aethiopicus and one from the Caucasus, USSR; no doubt C.da var seleucidus. That is about it, except S. nitidum widespread and abundant in the Islands

and quite a bit of S. propinquum. Polytoca punctuate looks rather like Coix. The other species like Tripsacum. – used up the morning. Back to Manila Hotel. The suitcase was there, badly battered. No tickets yet.

Lunch with Dale Weibel at hotel- his room: R 717 at Bay View. He picked up the check to my embarrassment. Back to Los Banos, changed shirt and gave seminar. There seemed to be good interest and many questions. To guest house – scotch and soda, supper and then to Pete Jennings' to see his ceramic collection. Some superb pieces- early Thai e.g. 12 -13 C AD Thai Pieces. Enjoyed the visit immensely also about 3 gin and tonics. Back to good sleep by 10:00.

Friday Nov. 18 [Transcribed by Kanti Rawal]

Got up at 5:45 and packed suitcase just in case; but no word. Morning paper shows strike far from over. When do I go? Read and loafed around. Took walk and collected a little. In afternoon toured the campus much larger than appears. Many plants labeled Hortus endemicus and Hortus medicus. Ran into Loy Crowder and he took me to see the pasture of Dairy Research Institute, set up separate from College and financed partly by FAO. Para grass, Napier grass and Guinea grass and Centrosoma. Good job on all of them. Napier grass kept down and mowed from time to time. Para-Centrosoma good combo. Dairy cattle seem to do well on steep ground. Various other legumes but Centrosoma seems to be the one. Reception that eve. for new arrivals: Stan Johnson, Ag Econ Davis Calif. Two very powerful martinis seemed to upset the stomach some.

Nov 19 Not flying yet. Went with others to top of mountain, lush jungle, etc. Finally got plane to Manila (I thought we were in Manila already) Went to Hong Kong, due to mix up had 2-room suite.

Nov 20 Took day off. Went to Victoria.

Nov 21 In **H K**, left luggage at Hotel, took one-way trip to Macau, "no return ticket available. Fellow took me to town in pedicab. No steamer tickets either. I was to miss the plane. Money changed black market ticket on ship to leave 2:00 am. 3rd class ... 112 people to the room." Anyway it looks like everything worked out and got back to HK.

Nov 22 Another day to kill. Took train to last stop before Communist China. Went out to lookout and looked out. Collected on the way. Went to Victoria and back. Finally got plane to Bangkok.

Nov 23 Arrived **Bangkok**, called Rockefeller Fnd (are they funding this trip?) Mentions several people. Talks about IR8 and problems they were having with it. He follows with notes for several pages.

Nov 24 Met with Dwight Finrock went out to Kasetsart Univ. Mentions several people and then **talks tech** re rice.

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Nov 25 Off to Konkhon, desc. of **Bangkok** flood plain and challenges re rice. Mentions a few other people and “go go go attitude”

Nov 26 took pictures of floating market, did some shopping, got set to go to Delhi.

Nov 27 Arrived at **Delhi**, Marlowe¹ met him at airport. Went to zoo, museum, lunch, etc.

Nov 28 Went to US embassy, called Rockefeller Fnd, no one there – holiday, Jack Rigney, has some good ideas.

Nov 29 Went with Marlowe to RF & talked with Guy Baird. Interesting comments on him. Something about sorghum.

Nov 30-Dec 1 missing

Fri Dec 2 “Went to K. P. Tiwari’s house for tea. Lives way out at Midianl School 5-6 miles. Tea & cakes, the purpose not yet clear. He is opting to stay with government & not go with University. Made arrangements for bike rental on way back. Ca 22 RS/mo. but guaranteed good shape. To office 11:30 Jethelmaspani [?] waiting – some function w. Tiwane we gelt. Mt Dean R. L. Gupta & in aft. AC. Jain in plant path, Bal in Genetics. There was a tea for Tiwari at regular Fri Faculty Club & farewell etc. I was interested. Some difficulty with my registration & jeeps late. Dinner, visit w Bhat & a little work on Hindi & to bed.

So far:

J. S. Patel	Vice- Chancellor
N. R. Bhat	(Genetics – Botany – Ret)
D. P. Motiramani	Dir. Research
J. P. Patel	Agron. Dusty’s counterpart
A.B.S. Verma	Head Agronomy
K. P. Tiwuri	Agostrology – leave for Go T [or GOI?]
S. C. Jethmelani	Hd. Agrostology
P. C. Janus	Plant Path
Lat [?] genetics & pb bread	
R. L. Gupta	Dean Agric.”

¹ Marlowe Thorne served at the Jawaharlal Nehru Agricultural University, Jabalpur, India from September 6 through December 5, 1966.

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- Sat Dec 3 "To Agrostology² area in morning. Very little work considering 1 Prof and 4 assistants & who knows how many peons. A small nursery area, a little N. P. K. study on hybrid Napier & Para, a botched-up rotation grazing study - all pretty hopeless, but the boys are enthusiastic & just maybe could do a little with some guidance. They don't know their Dichanthiums and this is one thing I can teach them. Aft in same sort of trivia & started to draw up an outline for a Sades reses (scheme for M. P." [The last part of this entry is unclear.][check this out:
<http://outlet.historicimages.com/products/rsf13761>.
- Sun Dec 4 "Cycled out to Agrostology area & collected true B. pertuss to show them. Some confusion re: D. aristatum & D. caricasiu. Must look into it here. In aft to Chrysanthemum, Rose and Poultry show in Jabalpur. About what the name implied. Snacks & felt too full for dinner. In eve. after dark a troop of musicians & 2 dancing 'girls' for 'happiness time' as Rao calls it. A firstborn Boy was born & celebrations held. Music enjoyable & the boys were real dancers. Saw a satellite. To bed feeling very stiff."
- Mon Dec 5 Toured farm with Dr. Verma and with Dr. Twari, Head of Agr. Bot. section. Not a good picture. Staff not well trained, but he is hopeful. Back is giving him trouble.
- Tues Dec 6 "Spent most of the day waiting for the Heads to finalize their programs for me. Mr. K. P. Tiwani came first & we set up an appointment for tomorrow at 9:00 to see his grazing trials. Wrote home. Made outline for discussion of forage research. Went out and looked at the Dichanthium again. Believe they have one of the little one-racemed types as well as pertusum, intermedium, annulatum, aristatum and caricosum. Possibly some introgression among some. Finally Bot. Tiwari came with a plan & I got one from Verna in the mail. They shall have to be consolidated. Some talk w Dr. Bhat. Argumentative lil fellow + fixed in his ideas. I probably am, too. Little else this day."
- Wed Dec 7 Went to field with K.P.Tiwari. Fertilizer trial on native hay. N 0-20-40 P 0-20 and K 0-20. No statistical difference so far but inadequate measurement 2 meter line only. Clipping trial early, medium, late and final on all. Just started, should change something - especially animals. Grazing plots with hay only vs hay, one year grazing next hay 2 years grazing etc. 6 reps + sure need it. Could be salvaged. A trial of rotation grazing 10-10, 15-15, 5-15, 7 ½- 22 ½ days grazing and rest. No control of livestock. Pretty sad. Wasted all of it for Bot. Tiwari + nothing. Funeral for a late staff member . (can't make out what is in parenthesis above-K) In eve to a marriage contact celebration for the Delhi _____ given by the Saxenas in Napier town.
- Thur Dec 8 "Spent time with Bot Tiwari looking at herbarium samples. He doesn't know them any better than I but knows the weed flora much better. Gather the Hebarium isn't much. In aft fot his program – so we can schedule something. To Indo-American Society in eve. At a Mr. Khan's place lovely garden & a really nice party if terribly corney. Nice people. Good food. Looked out by carpenter & several off lock."

² Agrostology, a study of grasses, see <http://en.wikipedia.org/wiki/Agrostology>.

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Fri Dec 9 “To Agrostology in morning. Found one lad who knows his grasses. Said they little one is not *C. cancosium* & I agree. According to Bar it may be *D. palladium* collected only once in the Nigeris in the 1890’s. Had good session with the boys & spent aft reading Sugars & rice papers – the latter look encouraging.

Sat Dec 10 “Up before 3:00 am. Quick breakfast snack at Farmham’s & into town by 4:00 to pick up Dr. Jaider, Vet college. Two cars of us off the Kanha Kisle National Park & Wildlife Refuge³. Which we reached by 8:00 am. Sal-Teak forest - a rather large dry forest as it turns out. Saw cheer (‘Cheetah’). Little else. Rented two elephants @ 5Rs each for two hours. Tried to scare up a tiger; no soap but good ride. The Vet College boys saw two from their bus. Had lunch, then a snooze & pulled out by 3:00 pm & back by 7:00. A very nice day although Dr. Jamdar’s little boy was car sick and then elephant sick. Got a receipt for the hire of two elephants R=10. They will never make money that way.”

Sun. Dec 11 “Cycled to town (Jabalpur?) after breakfast with the intention of going to ‘Grundy’ market. In a narrow street almost missed a rickshaw & sliced up the right hand. A kind shopkeeper filled the hole w penicillin ointment, put me in a rickshaw w. my bicycle & sent me off to Victoria Hospital where in due time a Sikh Dr. put in 5 stitches., shot me for tetanus (after a horse serum check) prescribed oral penicillin & vitamin C & let me go. Charge for medicines only. Cycled for about 1 ½ hours more & then back. By afternoon hand pretty swollen & sore. By evening hurting but not very bad, really. Slept fitfully until 4:30 or so when pain eased & the hand began to mend.”

Mon Dec 12 “Hand swollen, but not too bad. Went to dairy farm”. Details on dairy business. He must be taking notes as he goes along & not just recalling everything at night. And note that he has suddenly become an expert on the Dairy business. He goes in pretty much detail about number of buffaloes etc. and all the economics of this business.

Tue. Dec 13 Went to another dairy farm and a long description of details of that project including some kind of inventory. (are these U of I projects and why is he reviewing the economics of these dairy farms? I suppose he is an American University professor and highly respected.) . At the end of this entry he writes: “So-and-so bought cows in Punjab 3 yrs ago & now raises some – all ♂ ♂ die a natural death [starvation].” Then he lists the inventory of a certain dairy farm and end up with, “In aft started a brief for my seminar on Saturday. Hand much better.”

Dec 14 To field, talked with various people about projects. He is making suggestions.

Dec 15 Writing some things; trying to get a staff meeting. Rao brought his laundry on his bike, but there was a mishap and he got his finger smashed in the grill. “Went to field & looked at grasses. *D. aristalium* looks pretty normal on the Dairy farm side, but crazy on Agrostology side. Went to town in aft. This is a Sikh holiday and town was decked out. Now has a sore throat and hand is still sore. Came back and bathed throat in scotch and it felt much better.

³ Now, Kanha Tiger Reserve.

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Dec 16 Missing

Dec 17 Got off letters, went over Tiwari's data. Not much there. Evidently, he did a seminar and gave comments about it. He says that he had to do more of these. HE IS ABLE TO HELP THESE PEOPLE, EVEN THE PROFESSORS, EVEN IN THE DAIRY SIDE. HE HAS BECOME A GRASS AND DAIRY EXPERT. His throat is not good, lots of aspirin.

Dec 18 Off to town again: made comments, riding (driving?) around, checking this and that. Party in evening at the "club" for Dr. Gil, a big shot of some kind. "Miserable night cause unknown but probably one of those forever minor infections. Hand improving daily."

Dec 19 Worked on brief for Agrostrology and met with staff. They seem to be on accord with it.

Dec 20 Dr. Choubey? came by. Showed him Verna's letter and he agreed that Verna is off base. Toured farm again, Choubey thinks he knows more than he really does and poses a little danger to the project. "Yet Chawbey is an intelligent man & wants to do right." Did seminar in afternoon: well attended and good response. "Dr. Bhat as usual pouring cold water, but otherwise maybe some progress."

Dec 21 Went to Agrology in am, got good specimens of various things. In aft went to Contonment? Later, looked at library "Ye Gods" (ANTHER JRH EXPRESSION).

Dec 22 Went, with others, to forest preserve. "Looking at areas from which grass being harvested." "good grassland Herbarium badly needed"

Dec 23 Collected something and took to botany to be pressed. They had changed the locks and had to wait."Mulled over what is wrong with J. Nehur A. U., as if it wasn't obvious. Got letter from Samuel B. Kirkwood asking if I would be interested in being Dean of Faculty of Agriculture. Wrote I would; wrote Jean about it. Got copy of credentials & mailed."⁴

Dec 24 Did some shopping and wrote letters

Dec 25 Christmas & went to church at a Methodist church. Nice. Went to the Bryans for turkey, etc. "Staggered home at 4:00 ... some belly cramps & gas. Something not quite right, but not bad. A good Christmas for being away from home."

Dec 26 Did a lot of cycling – all over the place.

I AM GOING TO PUT THIS ON PAUSE. THIS EXPEDITION IS MAINLY TO SEE THE PROJECTS IN INDIA. HE IS NOW GIVING THEM PLENTY OF HELP AND I SUPPOSE THIS WILL CONTINUE. LET ME WORK ON EXP NO. 5; JUST FOLLOW THE SPREADSHEET FOR PEOPLE AND PLACES. HVH 5/11/13 – I picked this up

⁴ I do not understand Jack Harlan at this point. It seems like he is actually seriously considering a position with a lot of administrative work. On second thought, the "Dean of Faculty" position might put him in a position to make a big impact on other college professors. At any rate, he was considering it. I don't think it comes up again in his notes; so the whole idea was scuttled.

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again on 4/19/16., at the Jan. 13 entry. I started doing a real transcript, but I see now that I was paraphrasing my way through this one. HVH2

NOTE: I FOUND ON ENTRY FOR FEB. 14, 1967, HE IS GETTING READY TO LEAVE INDIA AND HE SAYS:
“Africa is out” and makes reservations directly to London.

Dec. 27 (It is now April 24, 2015, real time) “Started the brief on Higher Quality Research. Guess I’ll pour it on & get unpopular (?)” A note about his health getting better, then a note that he thinks they can finish up the consultations in a couple of weeks.

Wed. Dec. 28 He finished writing the brief on Higher Quality Research, cycled out to the farm, met with some lad, could not find a typist for his brief, “Club Night arrived late & played Mary a game of chess.

Thur. Dec. 29. “Locked out as expected. Read in ‘Library’ – nobody there as expected. Finally got to office & fixed up specimens of species for Kew & cleaned off the desk. Shrotri cut the stencil on Higher Quality Research. Arranged to go to Hyderabad by jeep leaving Jan. 14; some consulting in ?? & ??. Got invitation to deliver lectures at Phinedabad. Must decide something. Morning cycle east to brickworks & shops. Warm & windy. Winter must be over.

Fri. Dec. 30 “Locked out again, so read in ‘library’ – tried to collect in?? seed of spesias X – bought some potatoes at entrance. Finally got in & loafed. In aft the first session with the breeders. Reviewed rice & wheat work. They give appearance of knowing what they want to do & say they are after the high fertility response & etc. Suspect this is brand new but the All India Wheat Conference & ascessions to materials probably j??? Rice beginning to move, too. Need off-season generation facilities & concentration of specialists. On the whole, encouraging. In eve to Miss Campbell’s for supper – a Methodist missionary – runs a school, been in India 38 years or so & father was also a missionary – an Arictoha Methodist minister. Hawkins? & an English youngster, Genoville Clark. The other Indians – very pleasant. (In a.m. had cycled past, ? tank in into Old Town & back)

SAT Dec. 31 “Cycled to farm in AM. Talked w. H. K. Shaima about Tur & some others re: pulses in general. The work certainly needs sharpening, but some of the boys seem willing. To office & finished off brief on Maximizing Crop Yields. Set tentative date of Feb. 11 & so cabled McClung at IRRI. My contributions such as they are seem to be shaping up. Easy day. Spent evening reading & thinking a little about the theological essay I wish I had been writing since I had all this time. A month really wasted – or almost anyway. Perhaps some unhurried reflection is good if it doesn’t become a way of life. End of 1966!

SUN Jan. 1 “Took the Farnham’s on a cycle tour of Old Town. As I suspected they had not seen the old tank. Went into 2 Jain temples, an expalace, a residence and a Mosque. The Jain temples impressive as one might expect. Beautiful idols & well kept buildings. The whole trip very pleasant. Wrote Sherry & decided to start the theological essay. Spent some time blocking it out. To church in eve. With Bryans & Farnhams. Holy Communion at the raik(?). A quiet day.

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MON. Jan 2 “Started writing the essay. It’s good to have a project. Have key & no longer locked out. Visited with K. P. Tiwari over 4 projects he is writing up. They will surke (?) rice studies. I think we have done (BOTT), Nothing.

TUE. Jan 3. “Got letter off to Marlowe, wrote Swaminatha, Gujarat U., Ras of Hyderabad & declined to examine a thesis. Got trapped in an orientation meeting called by Materemani. Lasted until 1:00. Meetings get out of hand because Arya likes to talk. Almost all of their problems would be solved if they would ever put the prof. in charge of the classroom. Not ready for it yet. In aft. the 2nd plant breeding seminar. This time on pulses & again fairly lively. These boys aren’t hapelesa (?); they just act that way. Good session. Writing essay in eve & feeling like I am finally doing something.

WED Jan 4 “Had the whole day to work on the essay. It is slowly shaping up, but too early to tell if it will be worth the effort. About 2:30 went with K. P. Tiwari to a village 18 miles up the road to Kanti. Tiwari is spreading berseam (?) and giant napier here & there. We saw some village grasslands – very poor & probably v. low in fertility. Not much there – a crop of jawre (?) would be better. The village has 2000 people & some 700 milking buffalos; is in on the Jabalpur milk scheme. Milk is collected 2 times daily, measured by volume, checked for butterfat & adulteration. Some having in 1 liter, some a couple of pints. Sales price is 93 n.p. / liter and 1.20 in town which is quite a markup. Feed is paddy & wheat straw mixed w. green legumes. Lathyrus in bloom gives no (BOTT) of wheat & pulses – Haveli culture, very high binds (?) & most can carry paddy followed by wheat – pulse mix. Flax also pulses are grain, vetch, cathyseses (?), lentil. The tur mostly on the bands (?) which is a good idea. Village rather prosperous looking. The extension program was movies, no bulb & 1 hr delay to get one. v. cold! Subjects how to boil gur, value of education, Chinese aggression & USAF to rescue & anthrax. Should have cartoons for the kids. They love it. Home by 9:40. Absolutely frozen.

THUR. Jan 5. “Could write all morning – shaping up slowly. In aft still another session w. the plant breeders. I’m beginning to get some empathy here. With some strong direction they could get on with the job. Don’t think much would happen without it. Will probably have more sessions. More writing in eve. (BOTT)

FRI Jan 6 “Continued on project in AM. In aft. Gave my Seminar on Higher Quality Research w. Dr. Bhat. Seemed to go very well this time. Good reaction. Dr. Bhat & I still disagree about the old fashioned research, but that is OK. Got Jean’s letter & answered it, Burut is out. Well I wanted a discussion & got it, that is good.

SAT. Jan 7 “Continued project. Change in date for Hyderabad trip – may work out better. Will go to Nagpur tomorrow & pick up Ralph Cummings. In aft. went to village to see about work on grazing ground. Turned out no control over land, but could work up a project as a model. Must think about it. The essay slowly shaping up. W shall see.

SUN Jan 8. “Cleaned apartment for first time! i.e. more than a little dusty & minimal sweeping. Looks better but still dusty, of course. Packed, showered & wrote these notes & will stop here. Had early

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lunch but did not get off until 1:00 Nice drive to Nagpur – rather empty country. Much forest, hunting supposed to be good. What looks rather poor, cotton terrible, char & til not so bad. Got in about 5:20. Mount Hotel Annex sort of a dump. Lights out until 8:30. Scotch & rest. Dinner by candle light at 8:00, then a hike about pretty well shut down. Muslim quarter & saw nice mosque well attended, little kids at Sunday School, etc. Also walked by large Catholic Church & probably school. To bed where mosquitoes chased me under net.

MON Jan 9 “Out to Airport, picked up Dan X D. arist introgression about the building. Species X also present & Pert. Ralph Cummings arrived from Calcutta & we drove to Seoni for lunch at the Circuit house. Met 2 Peace Corps boys there Ohio & Pa. Then on to Big J⁵. Picked up laundry at canteen (?) & out to JNKVV⁶. Nice trip. Good visit with Cummings. Jay Band also arrived. Read late in a book I bought at Najpur airport on Caste & etc in Nepal.

TUE Jan 10 “To campus. Lots of color & etc. so back on foot to pick up camera. Lunch w. Bard & Cummings at Farmhams. Put on white shirt & suit & went to the convention. Cummings got honorary DSc, the granting of degrees very efficient, main speech good, but harassment by hecklers wanting it in Hindi. The pomp & circumstance most impressive. Back to barracks for a Scotch. & then back to campus for cultural show. Extremely good. The kids have talent & I was THE REST OF THIS IS VERY HARD TO DECIPHER & OF LITTLE IMPORTANCE

WED Jan 11 “Well, after the party what do you expect? Went to campus. Nobody but the army taking down the tent etc. Started a brief on recommendations for plant breeding group. Continued at home after lunch & finished 230 pp by 4:00 PM. That’s out of the way, but a little groggy from all that writing. Missed a nice day, but the whole week looks weak.

THUR Jan 12 “Turned in brief & worked on project. No chance of meeting with Botany but Verna may set up one in Agronomy when I get back from Hyderabad. No other action.

FRI Jan 13 “A holiday – continued writing – Biked up to Panagar⁷ & took pictures of wheelwrights’. Jewelry store not open. Finished out the Opus. Read it into the night. Not happy at all with it. Needs much more work, but ?? getting ?? (BOTT)

SAT Jan 14 “Muslim holiday “Ida”⁸ went to big J. to look & buy a float for WC which I had broken. Seems to be a children’s day of sorts. All the little tykes dressed up & looking beautiful; men wearing skirts, etc. The Hindus trying to give some competition. Got the float & fixed the WC. Looked puzzled over the opus. Can’t leave it alone. Listened to cricket match. Proofed the breeding brief.

⁵ Must be Jabalpur.

⁶ <https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=JNKVV+founding>.

⁷ 16 mi North of Jabalpur on MP SH 37A

⁸ This appears to be the end of Ramadan, Eid al-Fitr. See: https://en.wikipedia.org/wiki/Eid_al-Fitr

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SUN Jan 15. "More puzzling and cricket. Hope to unhinge this thing soon. Beaty & Clear were supposed to be in yesterday. In aft. went to Marble Rocks⁹. Very su?? plan indeed – narrow canyon, deep water, etc. Bought elephant head god. THE REST OF THIS ENTRY IS TOO LIGHT TO READ. HVH2

MON Jan 16 – CANNOT READ THIS ENTRY

TUES Jan 17 – CANNOT READ THIS ENTRY

WED Jan 18 "Checked out & found our way to Rayland (?) ???. Lee House not in but Jim Quels was. Sent Bryan back in my jeep for his meeting. Soon the jeep returned with a Richard Matsuura – USAID Public man and Kenneth E. Gibson USAID entomologist with pulses project. Had lunch at Lucley Tea Stall w. Jim & Lee House, David Andrews, Hugh Doggett and Dr. Majisu (sp?)(in letter from House) showed up. Long aft in the field & in Bull and Bar of Ritz & then dinner & to bed in the AASHIANA down the street.

THURS Jan 19 "Jim picked me up & the rest & out to Sorghum work. Spent good long day in field. Not enough wild stuff to tell us anything – so, looked at facition (?) pattern. Seems hopeful. In eve. All to 3 acres & met Wayne Feldman – Rice coordinator & Bob Pamery – soils – irrigation men.

FRI Jan 20 "Jim Quick took me out again. Spent day on spiklets and seeds. Believe one could do much better than Snowden – He over???. Must work on this. In eve took House, Andrews, Masinger?, Doggett to train and came back to Jim's pool – elegant for scotch & dinner, he leaving for Delhi in morn & so to bed.

SAT Jan 21 "Took H. Bryan to [Osmania U.](#) (rather impressive) & out to Ryendra?agen at a little after 10:00 for a visit w. Shastny(?). The guy is good alright. This would be the place if it could be worked out to study origin of rice. Back to Hotel AAshiaund? & sent jeep for Harold. Lunch & shopping – mostly jewelry – not very well satisfied to Salarjung museum – quick run some very nice material. To hotel & beer, bath & Ritz bar & back for Tandoori dinner [BOTT] Did not see Wayne Freeman.

SUN Jan 22 off by 6:30 & nice ride to Nagpur arriving 5:30. All well. Nothing of great interest.
Suggestions from Sorghum in fluorescences classification:

Degree of fasciation		1, 2, 3
Ne Branches	(carnut)	_____
Length	(measure)	_____
Branches/cm	(calculate)	_____
Regularity of Whorling	(Score)	1, 2, 3

⁹ The Marble Rocks located near Jabalpur MP India are a canyon or gorge on Narmada River in MP where the river narrows to a width of 10 meters and carves through a large area of white marble, creating a beautiful gorge of about 3 km in length. See: https://www.youtube.com/watch?v=tsFcdY_80Fo.

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Branchinesa	(Score)	1, 2, 3
Panicle	(Score)	1, 2, 3
Seed exp??	(Score)	1, 2, 3
Gaping of glumes	(Score)	1, 2, 3
Harness of glumes	(Score)	1, 2, 3
Glumes pinched		yes-no
Glumes very pointed		yes-no
Edges of glumes woody		yes-no
Glume texture	(Score)	1, 2, 3

[THIS LIST CONTINUES ON THE NEXT PAGE – DIFFICULT TO READ, BUT HE HAS ABOUT 7 OR 8 MORE VALUES]

Mon Jan 23 Off after breakfast, 7:30 [LEFT SIDE CUT OFF] & arrived before 1:00 pm getting to be a routine ride. Set date with ?? for Feb 24 on Products? Conf. Hand out detailed plans and wired Lee House & Wayne Freeman. Wrote brief on Public Service. Jack Clear still here.

TUE Jan 24 Verna sent notice of meeting with me in aft. & in aft. called it off because he had no staff. Wrote brief on techniques for agrostology & set date with Dr. Ticwari for tomorrow. Jack Clear came by for a drink & gave some suggestions on the public service. Got letter fro home. Time is really filtering out.

Wed Jan 25 Reworded briefs on Forage techniques & Public Service & turned in. Wrote above laberd?. Read Mehra's Sesame paper to fill in morning - only things mow was wheat nursery & pl??. In aft had a session with the plant breeders & used the recommendations as base for discussion. Seemed to go well. Checked out bedroll & lugged over for Jack Clear.

Thur Jan 26. Republic Day¹⁰; breakfast at 6:30 to get Jack Clear off to Blocpal. Then to [TOO FAINT TO DECIPHER]

FRI Jan 27 Message on transport & walked out. Wrote letters to A. P. Singh, Mehra, Swannithan, A. K. Jean, Lee House, Wayne Feldman, Mc Cleng (IKRI), Shaxtroy. Visit w. Menon, prepared for seminar on Dichanthium which I gave in aft. to rather good responses. Believe we have been rather effective in Botany (I hope) & helped some in agrostology.

¹⁰ **Republic Day** honors the date on which the [Constitution of India](#) came into force on 26 January 1950, replacing the [Government of India Act](#) (1935) as the governing document of India. (Wikipedia)

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- Sat Jan 28 Wrote brief on “The Use of world collections in Plant Breeding.” In aft session w. Agronomy Dept. Not too bad; but rather futile. Big beef on teacher pay scale, extension research – teaching overlaps, red tape, paper work, no budgets, etc. They got a problem alright.
- Sun Jan 29 Went to office & cleaned out desk – about to turn over to M.B. if the buys will finalize my system?. Spent aft cleaning lenses. At apt what a helluva lotta stuff! Wrote a mess of letters – Matswura, Sue, Jean (2), attorney re jeep of 1960, Paul Queen, & I think of some more. Long story & a lot of stuff to take poor might to boot – don’t know why.
- Mon Jan 30 Off 7:35 W. Rao. to Seoni Balaghat & on to Negpur-Rayor? Before 5:00. Looks nice – good trip, real “country” corulog – village life spread out to see. Rather liked it. Hit Durg & steel walls & all that jazz. Not as attractive but more money. A Peace Corps lad named Mike Rutledge of Iowa State Collage for the Principal. We had a little visit. Nice fellow. Bucket of hot water for a splash – bath just like old times – scotch or two. [LAST LINE TOO LIGHT TO READ]
- TUE Jan 31 [VERY LIGHT, BUT SOMETHING ABOUT HIS BREAKFAST] out to Rypur A. C. visit with Dr. PUROHIT toward land, had tea, toward some more, had lunch, visited w. rice team. Talked to the group. More tea & finally back to circuit hour about 7:00. Peace Corps girl named Carlem from San Antonio there & very glad to see an American. [Note: all this is very hard to decipher.] Principal is M. L. Purohit; thinks ag college is a tech school for training farmers. Too sure of himself – right some of the time & not right some of the times. Strongly opinionated. One of the staff suggested an All India scheme for weed control in rice. Should take this up with Swami?? They are loosing Dao to GOI and he is the only one who has the time – 10 yrs + knows what is going on. Talk to Matiramoni ?. T. C. SHUKLA RICE SPECIALISTS, m. p. Raipur is the man in charge now and he never worked on rice before. Place very small, but could develop along Purahits lines & not thinking big enough for a real education.
- Wed Feb. 1 Out to breakfast with Dr. Purahist & actively got off by 8:15! [VERY FAINT, SOMETHING TO DO WITH A BAD ROAD OR SOMETHING AND ABOUT 90 MI BUT IT WAS A VERY INTERESTING TRIP ... THEN HE MAKES SOME COMMENTS ABOUT ONE OF THE DOCTORS AND ENDS UP SAYING:] A good trip.
- THU Feb 2 [THIS WHOLE ENTRY IS JUST TOO HARD TO DECIPHER.]
- Fri Feb 3 Mailed “World Collections” [SOME VERY FAINT COMMENTS] Last one more or less typed. Spent morning in Agrostology w. K. P. TIWARI? & [BOTT] Paid the Farnlieu Rs1200. Think it a bit short, but they seemed satisfied.
- SAT Feb 4 Burned papers [WHAT?], did laundry, swept stairs & cleaned sink. It will be dusty but reasonably neat for M. B. Turned Feb 24 program over to Motiramnsni. Probably won’t get announdements out in time. Last minute cleanout & busywork. Down to Vet College & gave seminar on “The Concept of Public Service”. To my surprise went off very well with much discussion. The staff seems to be terrified of the students – amazing. Back at home packed & sorted. Finally about ready to go.

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Sun Feb. 5. Gave the V. C. a bottle of scotch & took off. Neither Rivori nor Jetlauralim? [THE REST IS TOO FAINT TO READ.]

Mon Feb 6 [TOO FAINT TO READ LEFT SIDE OF PAGE. RIGHT SIDE:] Big emphasis on black rust resistance. Rust screening at Mehabechiwar?. They are trying tents W/D much luck this year & no rust in field. Generally good technique but uneven land here & there & 2 row drill differential a little psychology work & fair amount of date rate & festival? triate. Altogether pretty good. Doing Iriveli at Singh's.

[SEVERAL PAGES VERY DIFFICULT TO DECIPHER AND HARDLY WORTH IT. HVH2]

FRI Feb 10: Out to Gujarat U. some 8:30 or so and no one about; tried again about 9:00 and found some students in. They said Dr. Pandaya was in Delhi but they notified Dr. Chinory and he came, toured lab & looked at ascorbic acid & enzyme work etc. Lunch at the Chimoy's, inve touring, then a lecture on genetic systems in crop plants, reception with V. C. & registrar a full but pleasant day. Not much discussion following talk – perhaps not much interest. DR. SC PANDEYA; Dr. J. J. CHINYOY Dept. of Botany; University School of Sciences Gujarat Univesity, Ahmedabad – 9 Much work on growth analysis at various stages etc. Drouth resistance studies. Effect of day length & vernalization on different varieties, etc. Some ecological studies in forest [BOTT]

Sat Feb 11 Out to ole Gujarat U. Tea & [TOO LIGHT TO DECIPHER] Must send Chimp some reprints & etc. Also convenient on his paper.

Gave Rao Rs 200 for postal

Rs 50 advance for exams

Rs 100 for his children

Rs 10 for laundry & misc.

Ascorbic Acid just might substitute for sunlight on rice in wet tropics.

SUN Feb 12. Got the morning flight O.K. & in fact place never more than ½ full. Air Oberor Hotel [BOTT]

& that I had a revelation. Lunch & chat w. M. B. He sacked out. Met Earl & Mrs. Price & the Webbs – carefull they like Burr Ross – Dan

Webber in bar. Then dinner w. Prices, Budelmeier & M. B. in Taj. & so to bed.

Mon Feb. 13 Sue's birthday! & no letter. Out to west Building by 8:30 Gave Mr. Walue stuff to mail to office; requested Indian airlines reservations Delhi – Nagpur 22 and Nagpur – Delhi 25. Asked re: air freight. Said do it through American Express & bill the project. Souds good. Got car & went over to Sri H. B. Singh discussed plant intro. Phytosonitony certificate is all that is needed if addressed to IARI¹¹ plus "attn: ultimate user Visit W.S.P. Kohli the wheat man – no better than he was in 1960 but

¹¹ Indian Agricultural Research Institute

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things moving in spite of [BOTT] commissary & scotch purlose – no razor blades, etc. To obeoi. Mehra had left for Sinula yesterday, but will be back for pulse conf. & will see him there.

TUE Feb 14 [FIRST 1 ½ LINES ILLEGIBLE] then take Dean Rao along. Checked brass prices at Dunder Nagar & compared w. Ivory Palace. Provisional decisions more or less made. Might as well go for quality & pay a little more. Got ticket revised to go AIR INDIA on 2 March to London & work out of there. Africa is out. Ticket confirmed. Left about noon with Earl & Fern Price & Dean Rao. Easy trip & in before 5:00 pm. Black top all the way. Cook crisis but a nice dinner after a couple of scotches. Early to bed rather tired. Ed & Frances Bay of Extension in to call. They are leaving soon.

[THE NEXT PAGES ARE ALL WRITTEN IN SUCH GOOD QUALITY AND REALLY DON'T SAY VERY MUCH, THAT IT MIGHT BE BEST TO JUST OFFER COPIES OF THE JOURNALS. AT ANY RATE HE DEPARTS DELHI ON MARCH 2 AND ARRIVES AT THE KEW MARCH 3. HE KEEPS GOING BACK TO THE KEW THROUGH MARCH 7. ON MARCH 8 HE FLEW TO PARIS, BUT BEDBUGS. HE MOVED TO NEW HOTEL ON MARCH 10 AND SPENT THE WEEKEND AS A TOURIST. FLEW TO BERLIN ON MARCH 13 & WENT TO THE BOTANICAL MUSEUM CHECKING ON HIS CYNODONS. Ditto for March 14 & 15, but on March 16 he took a tour of East Berlin. I will transcribe this entry HVH2:

THUR Mar 16: Bought the 1.2M East-west tour. Four hours mostly in East Berlin. Things are duller & poorer as expected but rebuilding impressive & some nice new hotels. The usual Communist show; Bug deal over Soviet War memorial. Cold & spitting snow. Miserable day for it. Out to Charlettesberg Schloss [[Charlottenburg Palace](#)] after & saw Greek displays & prehistory. [BOTT]

THE WEEKEND (Fri March 17 – SAT Mar 18 HE DOES A LITTLE SHOPPING AND VISITS THE MUSEUMS. THE RECORD ON MARCH 19 IS COMPLETELY LOST, ENDING UP WITH “for supper at the pub.” THE REST OF THE PAGES ARE ALMOST COMPLETELY ILLEGIBLE. HE RETURNS MARCH 28, 1967 HVH2.

[ONE COMMENT AT END OF MARCH 18 ENTRY:] “Then to town to do more shopping for the boys & got a jolt. Every cottonpicken store in town closed! Maybe there will be something at the airport. If not I'll have a few too many Marks.”

HE IS NOW IN GERMANY. ALL THE EXPLORATION IS OVER AND HE IS ON THE WAY HOME. I CANNOT DECIPHER THESE PAGES, SO I WILL JUST SAY THAT HE ARRIVED HOME ON MARCH 28, 1967 HVH2.