ADD-1

Here is a very close similarity between the Atarod & Wapichanna language. A example which springs to mind is the almost daily phrase in use when travelling, "where did you sleep?" The Atarod term is "SAID PU HAWIN?"; the Wapichanna, "NAITI (or NAYAM) PU DAWIN?". Much of the Fauna & Flora have the same names; their mythology & astronomy follow on the same lines in general. yet the two languages have so many words, verb terminals & abbreviations that are peculiar to each that the Wapichanna has great difficulty in understanding Atarod until he has some practice. This is evident even in the face of the Abor. Dr. facility in understanding almost any language (even English) when he wants to. an understanding gained by uncanny insight reading. To the outsider both Atarod & Wapichanna language appear completely different at first.

There is no doubt both tribes had a common origin somewhere, probably somewhere far to the South of the Amazon. Dr. da SOUSA Sousa, an expert in refrigeration in Minas Geraes visiting the Rio Branco, pointed out words in Wapichanna that he knew in that State from which he had come. I am inclined to think the two tribes were one at some remote period in the Savannahs far to the South of the Amazon but due to the advance of so-called civilization with its subsequent exploitation & persecution, part of the tribe fled by river to the North & came to rest on the sources of the Rupununi & Tacutu Rivers. A hundred or more years later the balance of the original tribe also trekked North to settle in

Makuxi = Pemon + Kapon
Taurepang = Arekuna + Kamarakoto

the savannahs to the West of Boa Vesta. There were a few Pouriciama Indians resident at the source of the Tacutu who claimed that they once held a very large territory in the Southern Savannahs, & it may be they accepted the new tribe as friends. Gradually by marriage & sheer virility the new tribe became predominant & became the Atarods. Persecution drove the Wapichamma now living West of Boa Vista in the Rio Branco, to seek new homes & they joined & finally absorbed the Atarods. Meanwhile war with the Macusse urged on by the Caribs in the hunt for slaves, caused one half of the Atarod tribe to migrate again in search of peace & safety. & these became the MAPIDIEN Tribe far to the South on a branch of the Mapuera River in Brazil.

I am certain the Taruma fled from the coast around the mouth of the Essequebo River, but who they displaced at the head waters of that river I never found out. I am equally certain the Atarods did not come from the North, i.e. the B.G. coast. The Taruma have had beautiful corials, best suitable to the family unit ascending a river of comparatively small dimensions. Both the Atarods & Wapichamma made large boats – (neither tribe ever attempted to make a corial in the time I spent among them) – boats that were large enough to require 8 to 10 men to manhandle in the Falls in the Essequebo. These boats were not suited to the family unit on our rivers but imminently suitable for a journey over some thousand miles or more on such large rivers as the Amazon, Rio Negro, Tapajoz or Xingu stretching far to the South in Brazil. They were large enough to accomodate more than one family with large stocks of food. & could weather the sudden storms that spring up on these rivers. Such storms would be fatal to woodskins or corials if any attempt was made to cross from one bank to the other

ADD = 3

There is no reason to suppose that the Macussi were more formidable, or given to War, before the appearance of the Caribs than any of the other tribes in the Colony. Except such tribes as live in the high Pakaraima Mountains, the Macussi are by far the poorest boat & corial builders & their best are Heath Robinson caricatures & completely useless except on the still waters of the lagoons & such part of the Rupununi Rivers as they hold under their sway. All their boats for running to town were made by the Wapichanna – 1900 to 1922 – & the recognised middlemen did quite a trade for such boats when I went up country at first: the recognised price being one "buck" gun felus — this last representing such little accessories (powder shot caps. knife, etc) as the builder could squeeze out of the purchaser. In my time 90 % of the Macussi boats were Wap. built. The Macussi were ever offering their prettiest girls of the tribe to Wap men, solely with a view to getting a boatbuilder & steersman into the tribe & thus secure more trade goods, such as they saw the Waps getting year after year when, independent of the traders, several boats would pass through either with produce for sale or manned by men going to work for wages on mines or timber grants. Only one man – William, half brother to Capt Roman, an excellent boatbuilder & captain for the river – took advantage of the Macussi offers of women, but he brought her to his home & everyone raised such Hades that he soon sent her back, without making a boat as promised or helping the Macussi in any way.

AD 1.4

One or two poor grade workers tempted by the Macussi offers of girls went to live in that tribe but they were no loss to the Waps. The best of these men was a one-eyed Wap who married & settled down near Annai to become the Govt. Stock Farm manager. He was a poor worker & hunter & his attempts at enticing his fellow Waps to do the same were complete failures. One of Watkins's daughter was adopted by the Dist. Comr. (Haynes), taken to town & educated to some extent. She came back a painted doll with the most disgusting airs & manners — a disgrace to her tribe & outside influence — and the last I heard of her she was living with a black negro squatter in the Rup. Savannahs.

On the other hand the free lance women of the Wap. tribe were encouraged to marry Macussi men. The Waps needed blowpipes (a few) & wrali (to a large extent) & such husbands provided the necessary middlemen to conduct such & any other possible trade. No woman was allowed to bring her man into the Wap country proper, but she could live in the No Man's Land in the Kanaku Mts or on the Rupununi below where the last Wap. village was located. These men were three in number in 1900:— "Brummell" who, after being allowed to reside at Wetchabai, was living in the mountains & who — 1906/7 — formed the village of Sherli-aneb; "Ishal" who lived about the mouth of the MAPARI Creek (died about 1903); & one other man (SCHOONER whose name I ~~forget~~) who lived at MURO WAU. The influx of more traders, & the introduction of bakula bleeding stopped this practise as the Waps were put in the position of earning unheard of wealth

ADD - 5

Had the Atarods come from our coast they would have had to pass up through the Macussi country unless they ascended the Rewa (a corruption of an Atarod word "ILLIWAU") + Quitaro Rivers. both with very strong currents in comparison with the sluggish Rupununi + calling for a couple of weeks strenuous paddling. If the Macussi were peaceably inclined why did the Atarods pass right through + settle to the South? Why did the Macusse not absorb such wanderers who as boatbuilders were definitely needed? If the Atarods passed through in peace + safety why did they later acquire such a fear + hatred of the Macussi.?
If however the Macussi were pugnacious + keen on War why did not the Atarods not go on up the Essequebo or settle in the forests which were uninhabited before entering in country in Macussi control?

Essequebo + all tributaries have old sites
- large Clearing - sparse back into forest -
of these communal houses
Corials described

MABBA TIU

1905

On my first visit among the Tarouma Indians I had contact with a man who openly known as MABBA TIU (MABBA = BEE; TIU = PENIS). Many Indians have nicknames of a derisive character which must never be mentioned in front of or to the bearer, & this was the first time I had ever met any Indians who was openly addressed by a name that could give rise to considerable ridicule & possible offense. I was interested to find the reasons for such unusual procedure, but my enquiries were always skilfully sidetracked. SAIK TAU – a full blooded Tarouma & my devoted interpreter among the Tribes – would cock his head in the attitude of listening for some mysterious far away sound in the forest & raise an extended rigid finger unmistakably spelling 'GAME', quite enough to distract my attention for the time being.

Several years later I was prospecting for balata in the forests on the source of the Essequebo & its main tributaries with a gang of Tarouma men composed solely of Taroumas under the foremanship of SAIK TAU, and were certainly 100 miles from any known hut & village. We had gone into camp one night in the gathering gloom of dusk, assembled around a central fire with our hammocks slung in a circle a few feet away when SAIK TAU spoke a sentence or two in his tribal language which I caught the name of MABBA TIU being bandied back & forth to loud laughter. This man had been dead for a year or two I knew so I said "You always put me off, SAIK TAU when I asked you for an explanation of this man's name so I want you to tell me now." "But that will take time" replied SAIK TAU "as I will have to tell you a long story that we Taroumas hand down to our children in our talks at night" "That suits me" I said "and I'm sure all your men would love to hear it again" There were yells of approval: the fire was banked up, cigarettes were rolled & lit, & everyone made themselves comfortable to listen.

"I have already told you how DUID caught Woman in the lake & how we Tarouma are her children's children. In those long long ago days we lived in TUMUNIKARI'S house at first, but later as we became many those that married were taught by DUID how to build houses for themselves & went to live some distance apart in the forest. In one of these huts a little boy was born who had a tiny little small penis, & when he grew to man height it was it was just the same. At its root it was no thicker than a finger tip & sloped away gently to a tiny end. It would have required 10 pounds of seed to be the length of that of any other man. The baby grew big & strong & when he took his place in the [illegible] in the dye houses

as a full grown man

he must have a wife. There was one young girl who had been carefully watched by her father & mother of whom he was very fond & at length it was arranged they should be married. The young man was asked to take his hammock in the girl's hut & after the door was shut that night, the father carried the young man across & dropped her in his hammock. It was near to midnight when the girl leapt out of his hammock & rushed back to her mother shouting "I will not sleep with that bad man. I will not, I will not" The father & mother argued, even to using force, but the girl was determined. When all this was going on the young man untied his hammock & went back to his own people's house. Next morning by dawn by the women's door there was much chatter among all the women about his being off so ill in bed. They all laughed & joked a good deal over the girl's description of her love affair They argued she was ignorant of what should take place but the girl refused to even consider allowing young man near him again.

Everyone knew what was the matter really & the young man became very shy of all women, as he felt they were all laughing at him There was one woman in the tribe however who had a small son whose father was the Wind. & she began to take an interest in him. She had a ready smile & a cheery greeting for him whenever they met & he would give her an answer back. One day she paid a visit to his hut but instead of going home when it was time to close the door at night She walked boldly over to his hammock & lay down with the young man. She stayed quite a while but suddenly she flung him out on the floor & jumped out of the hammock herself saying "This man with the little penis is no use. All the time he has been working away & with all the help I could give him I have got no satisfaction & Now my desire is such that a man I must have a man at once", & she began to go round the hammocks of all the other men. Next morning around the women's door she told them all about things & as she was a woman of experience they had to believe her with louder laughter & more jokes than ever.

The young man was now very ashamed of his peculiarity & began going long distances by himself into the forests in search of fruit & other things. One day he found a nice pool in a new creek & decided to have a bath, after which he lay down on the sands alongside to dry himself & went fast asleep. When he woke up he found a Bee sitting by his side "Hei!" he asked "Who are you?" "I'm just a lonely

ladylike" she replied. "But I have never seen you before" said the young man. "No" she replied "I am a stranger here & have come from fa-a-ar". "Then what have you come here for?" he inquired. "I left home today hoping I might find a man" was her answer. The urge to have a wife was great & he began to fondle the Bee. She seemed pleased & did not resist or try to get away & soon they were locked in a fond embrace.

The sun had begun to slide from overhead when the Bee moved away from him saying "I must be going home" "I am now your husband & I go with you" said the young man. "That is impossible" said the Bee "Nonsense" said the man "Show me the way & I follow" he ordered. They soon came to a large hole dug by a Giant Armidillo down which they went until they reached the Armadillo's house at one side of which was another smaller hole leading on downwards. They scrambled down this until light came up from below & soon the young man saw far beneath him the beds, the rocks, the trees & pools of another world (a small open hold through which) "My home is down there" said the Bee "so you can see why you cannot come with me." "You just wait" said the man as he began scrambling back up above. He soon returned dragging behind him the end of a thick strong bush rope, which he began pushing away down to the world below. The bush rope was far too short even when he strained & pulled all he could until no more rope would come. "Never mind" said the young man "we all know how fast this bush rope grows to get down to the earth (from the tree tops around) It will soon reach your home & when it does I will climb down & join you." The Bee was very pleased & said she would wait for his coming & they parted company.

When the young man returned home he told everybody about his romance & how satisfactory it had been for both himself & his partner. Everyone roared with laughter & made all sorts of jokes over it & they promptly called him "MABBA TIU". He told them all about the bush rope & how he was going to leave them all very soon, & how he would never come back amongst them if his new world was to his liking.

Nearly every day he went off to see how the bush rope was growing but MABBA TIU had long to wait. The dry season ended, the rainy season came & went, but still he kept going in the hope that the rope would be touching the world below. At last he did not return to his home & the people knew he had gone down the rope

to join his wife. Day after day they waited thinking he would walk in, but as he did not appear, they decided his new home & his wife must be more pleasing than where they were.

That year a serious drought had set in. The sun was hot & fierce; the creeks & pools dried out & all the fish were dead; even the forests were bare of fruit & everyone was hungry, although they all scattered & searched far & wide for food. MABBA TIU had always walked along the same road to where his bushrope hung down & he had left a well beaten trail. Some of the young people followed this one day & they looked down on the world where MABBA TIU had gone. They rushed back to tell of what they had seen & how green & good were the forests below. Next morning they all went to see for themselves & then a young man said he was hungry – terribly hungry – so he was going to climb down below to see if he could find some fruit or something to eat.

They walked, then going down, down & soon some one else began climbing down also. One by one they grasped the bushrope & were on their below also, until all had gone & left one. The same woman was again big with child to the WIND & she was afraid to go farther than the Armadillo House as she was frightened the hole was too small for her to get down. but when she found herself all alone, her fear left her & she also began to scramble down. She was so big however that she could not get through & as there was no one left to help her back she stuck fast in the hole.

The Taruma found the new world to be good: the forests were full of fruit; the creeks were running plenty of water & there was abundance of fish everywhere, so they decided to stay. Our old chief – "KUSHAR" – has often told us how many we were at one time, but how of late times many have grow sick & died until now my tribe are few. We know there is a way back up above, but none of us know just where it is. It may be the bushrope has died or that we search in the wrong place: perhaps some day I or my son or his son's son may find it

That is how – we Taruma came to live here & that is why we should always – have some man in the tribe called MABBA TIU. just as there is always some one called DUNN

Absolute silence had been maintained by every one while SAIKTAU was telling the tale but, despite the sad ending & the long monotonous towards its close, every boy began chattering & laughing. They were all in their early twenties at the most, full of the gaiety of youth & well fed at the moment: so were not concerned with the down fall or troubles of their tribe.

What did amuse these young irresponsibles was the relation[ship] of the story to the dead man of their acquaintance whom they had known intimately as 'Uncle'. At once conversation became general; the subject every possible angle of sexual intercourse between a man & a bee; the peculiarities of the deceased uncle. & the more impossible the suggestion, the more hilarious the laughter. After some half hour of this running badinage, they curled up in their hammocks one by one to sleep. & I got a chance to question the raconteur. "Was our old friend really made as you have described. SAIK TAU?" I asked. "Yes" he replied, "quite truly, as we men have often seen when we bathed together". Then he gave a long description of the diminutive organ which need not be given. "But if all you say is true why did his wife marry MABBA TIU?" I queried. "Her [first] husband was dead" he replied "and the men of our tribe are few. so it was better she marry him even if he could never give her the satisfaction that every woman at times must have, as he could cut a good field & keep her pot full of fish & game. It is better to own your own fire than to watch that of some one else". "How long were they married?" was my next question. "A long time" was his answer "for more rains at least than I have fingers" "Then in view of his being no use & all that" I asked "how do you account for that son of MABBA TIU?"

SAIK TAU had been wriggling into position for sleep but I demanded an answer. He raised head a moment to answer "That boy was no more the son of MABBA TIU than you are, Boys. and what I know I know". He sank back & flipped the sides of his hammock over his body & face, an attitude of sleep which etiquette forbad disturbing & I knew it was useless to continue the conversation. but I could at least give vent to my feelings "You disreputable old So and So", I hissed, "I have often wondered why I employ you as I am certain you would corrupt anything that wears a lap, be it either beads or [bark or] cloth". I knew he was waiting for some reply but he did not speak. I listened to a few inarticulate chuckles for a minute or so till he dropped asleep.

Diminutive sexual organs are not peculiar to the Tarioma & I have seen several cases among other tribes. The testicles more normal in such cases & only the penis a tiny organ of little more than [an] inch [or so] in length & no thicker than [a little finger] ordinary lead pencil. One in particular was in the Wapichawna tribe. At that time practically every able bodied man was in my employ in some form or other & once or twice a year I would pass through nearly every village. Babies are the pride of [not only] every Indian mother, but of the whole village. & within an hour of my arrival all the new babies would

be brought along for my inspection & admiration — in their birthday suits of course.

This particular boy was a fine chubby, healthy & pretty baby some few months old. He was quite average in size & appearance & flawless, as he lay kicking in my hammock, except that he had practically no penis, a fact that his mother brought at once to my attention. I was able to watch this boy from time to time for several years as he grew up, & at that time no child - male or female - wore any clothes so I saw him romping around naturally. The organ grew a little & protruded not more than half an inch beyond the abdominal wall up to the age of 6 ~~&~~ 10 7 years, when most children were given a loincloth or kafo. The boy was carried off about this age as companion to his grandfather who decided to pay a visit to his ancestral home in Brazil & never returned.

I know of no case where a man was given a tribal name as a result of such abnormality since it would be conducive to ridicule, to which all Indians are extremely sensitive. One male when bathing as a boy was bitten by a peran fish which took a half inch out of his penis about mid way down, as a result of which the upper half developed at 45° list to port after the wound healed up. He was given the nickname of KADABAB TIU (Crooked), a name which was never mentioned before the man himself, his family or relatives; his tribal name was quite different. The case of the Tarumá man was entirely different. As SAIK TAU said "There is always a MABBA TIU in the Tarumá tribe," in recognition of their myth, just as there is always someone in both the Tarumá & Wapichenna tribe called DUID after the half-brother of God in the Creation Myth. On the other hand I have never known any one assume the name of TUMMIRIKAR - the Creator or God.

Among the tribes who have had little or no contact with civilization it is not unusual to find a child whose reputed father is the WIND. This may be due to such tribe or village awarding ostracism or some punishment for the offence of promiscuity. I have known of a family drive a girl out of their village on her becoming pregnant before marriage. She had been contracted to marry a certain male as a child & they had guarded her night & day from casual association with any man. The punishment was awarded more in pique & fancy, at the failure of their well known aspirations & expectations than any tribal or communal code of crime. A woman might declare she was pregnant to the WIND from selfish motives. The status of unmarried women change when the father dies. The kid is generally abandoned or destroyed & they must seek shelter with some one, generally a married brother or sister who possess a house. The unmarried woman is more of a

dependent in her new environment & especially if she has to accept a home with distant relatives or strangers. when she will be open to the advances of any of the men. In lonely isolated villages such a woman becoming pregnant points to connection with some in the house & her hostess at once becomes jealous. & quarrels ensue; the peace of the entire village can be disrupted & the girl may have to seek refuge elsewhere. An unmarried sister may even send to call her unmarried one to assist her during the last few weeks of pregnancy. & cases occur where the expectant mother has insisted on the unmarried sister diverting the amorous inclinations of her husband from herself at such time. Should a baby be the result, trouble inevitably results. Naturally, such a woman stands to gain considerably if she is pregnant to the WIND. Her status in the tribe, village & family circle is unimpaired; she does not need to move away in search of a new home & she continues to draw on the party with whom she is staying for food & necessities over a time when she is not an economic unit in the home.

During the first decade of this century I can remember a number of children whose parentage was attributed to the WIND. – about one each twelve or eighteen months – among the Wapichanna. It was a wonder there were not more, but the practice died out gradually in front of approaching civilization & new ideas. One of the last cases I remember was a woman who had buried a husband & who had for some years travelled the whole district & living with any man for a few days or weeks according to his needs. When she produced a first child when she was probably about 30 years old (an old woman by Indian standards) & put the parentage on the WIND the entire tribe, collectively & individually went into howls of laughter & ridicule as there were few villages where she had not slept with some of the men. This practically killed the practice, as few women dared to face such potential ridicule.

There was one woman among the Wapichanna who was a model of chastity & industry. She lived in a lonely village where four married brothers each had his own house & where she was safe from temptation except passing strangers or visitors. She was very hard working, making several hammocks, a considerable amount of farine for sale each year & growing large supplies of assorted vegetables. I purchased all her produce & about twice a year she would arrive at my station with about half of her relatives heavily loaded up with whatever she had made. She was in her early twenties when she walked in carrying a baby whose father she solemnly assured me was the WIND; a statement I definitely ridiculed. The District Commissioner (Melville) who probably knew more of Indian habits, ways of thinking & psychology than any man in the colony was there & knew the girl well. He was interested in her attitude & together we spent a couple of hours bantering.

bullying, ridiculing + questioning her. The girl was perfectly frank + open + discussed her private life since puberty with us as if we were near blood relatives. but she was most emphatic that the WIND was the father of her baby. nor could we shake her belief or trip her up. There was no incentive for her attitude from personal loss: she was safe with her brothers as also their wives from quarrels or jealousy + she could have married almost anyone she cared to choose since polygamy was the tribal policy. I believe the girl was genuinely sincere + truthful as far as she knew. + Treloille thought the same

During times of plenty the Indians hold big PAIWARRIES. (a drink + dance) which may run non-stop for as much as three days + nights. Great physical exhaustion can follow a prolonged + strenuous dance. partly induced by the quantity of beer consumed + partly by exertion in dancing for hours on end. This can amount to almost coma for hours after being overcome + in such a state the maid may have been visited by some male without the fact registering on her brain + memory

That probably was the solution of the problem, but in any case the tribe accepted her story as truth. The child died when about 2 years old but while it lived was always being given small gifts by everyone as a recognition of its unusual parentage. The mother known as AWALIKULI (whirlwind) eventually [illegible] died soon after.

This [illegible] contains [illegible] yarns & songs (about 150) for Dr Myers. The copy I kept has been almost destroyed by insects + the ink is nearly illegible. I'm copying it out again & adding some explanatory notes + various personal experiences in connection with the story.

ABORIGINAL INDIAN FISH POISONS.

Nearly 20 different indigenous vegetable substances are used by the MAPICHANNA Inds. as fish poisons. Of these the HAIARI (of which there are 5 recognised varieties) is far the strongest and most popular; the others being used for special fish or in emergencies.

HAIARI is a bush rope found in isolated spots all over the entire forests of the Colony but increasingly rare near populated centres through having been cut out for fish poisoning. It can occur from a string like creeper when young, to a 2" - 8" dia. stemmed vine in the older groups. It invariably heads for one adjacent tree for support in its fight for light and life. In the mature groups the stems are found almost bare of leaves right to the top of the 100' - 200' forest where it develops foliage, flowers and seeds, thus presenting great difficulties in the botanical study of the reputed varieties as being quite beyond reach or observation. The Indians know the varieties which are the most potent but frequently have to use any of them since stands of the HAIARI are difficult to find nowadays; a failure in use being ascribed to some divergence from the accepted ceremonial ritual whereas it is actually low toxic content. Of the common HAIARI the stems only are used, but the roots are known to be even more deadly. The Indian rarely digs up the roots however as they prefer to leave these to ratoon in future years.

Such analysis, etc. as has been done from local HAIARI samples were made by Prof. Tatterfield, Rothamsted Experimental Station, Harpenden, Herts, who can supply full technical data and where samples can be seen. Under analysis only a single sample of HAIARI has been submitted which gave a sufficiently high ratenone content to compare somewhat favourably with Derris Root. No data was sent with this particular sample regarding locality where found, etc. and no further samples submitted have been anything like so good. Undercultivation the poison content might be raised considerably, especially if the good variety could be re-located. Unfortunately no one knows anything about potency of the varieties, its cultivation or anything.

The MAPICHANNA Inds. are inveterate fish eaters and have scoured the forests for HAIARI for a radius of some 30 miles beyond the Savannah country where they live in Rupununi. To offset this scarcity the Tribe have long cultivated one especially potent variety and on my introduction to the Savannahs I found quite a number of the older people with a stand of this HAIARI planted in their fields. This variety was known by the name of KURAKU_A_AI and the Indians said that half the quantity of this vine would poison a given area of water by comparison with the ordinary varieties. Both roots and vines were used.

The vine was propagated from slips planted in the forest on the immediate edge of the cultivation or field under the shade of suitable trees which served as a support to the growing vine. I have never seen HAIARI growing to good advantage in the high forest unless under good shade and I have never seen any Indian grow it in the centre of their fields. I have no means of knowing if this Tribe still cultivate the plant.

So far as I know no one has attempted to grow HAIARI on the front lands of the Colony and it is doubtful if it would grow to perfection on the mud near surface water table and poor drainage. Govt. however have a fairly large area planted with HAIARI in the N. West Dist. but rate of growth, rotenone content, etc., are not known to the public. The Dept. of Agriculture may be able to supply data. The Abor. Indian is very careful in the selection of the site of a new field as cassava roots rot very readily if subjected to excessive moisture. They invariably select open texture sandy loam soil on high land with good natural drainage (creeks) and a freedom of seepage from higher altitudes. Under such conditions HAIARI grows readily and well and I have seen plants, 3 years old, running 1" to 2" diameter in the better vines, used for fish poisoning successfully.

The only part of the Guiana forests which, to my knowledge, carries anything of a reef of HAIARI is along the source of the Burra Burra River in the vicinity of Surama. I should estimate it is possible to collect 50 to 100 tons of the green vines in the district, although the damage done by forest fires in the droughts of '27 and '40 is unknown and may have reduced the stands. Indians assured me up to as late as 1939 that the poison was still as prolific as previously. A collecting centre could be made at Surama; abor. Indians engaged locally for collection in the forest and porterage to centre and port for shipment. A competent analytical chemist would have to be in charge to determine rotenone content of the different varieties found, as also the toxic extent of smaller branches, rootlets, etc. Transport to

the coast would be via Rupununi River or Buru Buru by boat, and could not be done for less than 6 cents per lb. (Surama - Bartica) under the most favourable circumstances. Collection would be conducted during the dry season (Sept. - April) to utilize sun and dry wind to best advantage in reducing moisture content. Shipment would be made during wet season (May - Aug.) to take advantage of the floods for easy transport. As a rule both rivers are not navigable to anything larger than corial during the first 4 months of the year.

Surama for some unknown reason seems to be more suitable for indigenous HAIARI than the rest of the forest.I have seen, and would be the best centre for experiments in cultivation etc., but the long distance inland and heavy cost of transport would be a serious, probably prohibitive, handicap. Collection along the rivers of the colony is uneconomical, owing to rarity of occurrence of HAIARI in the forest, the difficulties of navigation; and complete lack of a resident population as collectors.

NOTES ON FISH POISONS, BY J. OGILVIE ESQRE.

The following notes on fish poisons have been supplied by Mr. J. Ogilvie, formerly of the Rupununi District who was resident there for over twenty years. The information applies only to the Wapichana tribe.

Aishals. These are apparently the same as the haiaris of the Arawaka. The Wapichana recognises four forms as follows:-

(1) Black Aishal or "pud", sometimes called Red Aishal or "Weir". The stem is beaten and dipped into water producing a milk white juice.

(2) White Aishals. Two varieties of these are recognised: they are used in the same way as the black Aishals. as above.

(3) One of these is again somewhat specially divided into two varieties, namely: Kumasaukun - Kumas = Pea. (2) Atolikun - Atoli = alligator.

(4) A fourth variety is also the white Aishal and is called Kurukurusi. This is cultivated and grown from slips. It is the strongest poison known to the Wapichana tribe. It is generally maintained that only the roots are used, but Mr. Ogilvie has personnally observed the stems in use. On a recent visit (Dec. 1928) I found this variety still cultivated and Indians report that if planted in the right soil its growth is very rapid.

Haiari - Haiari - Kupa. This poison is peculiar to the Turumas, and apparently is unknown to the Wapichanas. It is only slightly poisonous to fish. It grows abundantly along the banks of the Essequibo River. The natural order is leguminosae. The Turumas only use it occasionally as the Aishals are common in their territory and it is seldon necessary to resort to this poison.

Katuburu. Bush rope. Fairly common. The stem is slightly striped with brown which readily distinguishes it. When cut is gives a little milk. The stem is beaten and dipped in water as in the case of the Aishals. With this poison the water turns black; it is not as deadly as the Aishals and is used principally for poisoning small pools.

Ai. - ? Karroconalli - Tephrosia toxicari.

Kohira - Bush rope. Fairly common; the stem is trilobed; is not as powerful as the Aishals, but is used in the same way. It, however, turns the water black.

Kumarau. A shrub; grows to a height of four feet. Nearly every Indian has a certain amount in his field. It grows quickly from slips. Only the young shrubs are used, which are taken in the hand and macerated under the water, otherwise

wise the juice blisters the hands. Used for special fishes, names unknown. Two varieties are recognised, namely black and white.

Kowar. A tree. Grows from 50 to 100 feet high, with spreading branches, common on the river-side. Seeds only used. These are pounded in a hole in the ground and the pulp flung in the water. The hands must be wetted before mashing the pulp to prevent irritation, which, however, is not severe. In practice a calabash is used to scoop the pulp out of the ground. It is by no means a powerful poison but is frequently used in small pools on account of its abundance. In Brazil the wood has a reputation for making the best corials and boats and vessels made of it command the highest prices.

Invak. A small tree prolific along the lower slope of all mountains in the savannah. Leaves only are used which are pounded with water in a hole in the ground. The pulp is then packed into a basket which is dipped in the creek, subsequently removed, and pounding repeated until all the poison is extracted.

Kunan = ? Konani, Clibodium sp. Leaves and seeds used. Leaves and seeds are grated and mixed with cassava, which is then wrapped in a banana leaf and slightly roasted, the whole having a green pulpy appearance. This substance is then made into pellets of somewhat less than half an inch in diameter and thrown into the water; the making of the pellets taking place at the water-side. It is used for special fish, for example, Kuti and mullet. When the fish takes the poison it becomes very active, swimming close to the surface and often jumping out of the water. As soon as the poison acts, however, the fish sinks. For this purpose it is necessary to capture the fish before the poison takes effect. If the fish can eject the poison before it has taken effect it soon recovers. The plant is propagated from seed, and every Indian has it growing nearby. It grows quickly and matures in a few months.

Pursunan. This is the agave. The young plants which are formed on the flowering stem are used. These are crushed with water in a "mortar" formed in the ground and the resulting mass thrown into the creek. It is not a very powerful poison and not generally used. On a recent visit this poison was being successfully used in Brazil for curing dog Mange.

Tikum. A shrub. Matures quickly; cultivated from slips; leaves only used. Pounded in a mortar with water as above. It is not a very powerful poison.

Pi. A tree. Fairly common, leaves only used. Pounded in a mortar with water as above, not a very powerful poison.

Idini - (Wapaiana). It is only rarely used. Small scrub tree 6 - 10 feet, grows in savannahs very plentiful. Bark used and pulped in ordinary way. Indians do not believe that this poison kills the fish in the same way as other poisons. Their belief is that the poison effects the eyes of the fish, at first at least but the fish soon die. The characteristic of this poison is that fish killed with it do not putrefy certainly not under 12 hours, which is not the case with any of the other poison where putrefaction set in quickly. Mr. Ogilvie believes that there must be a good deal of it in the district.

C O P Y

FROM: Assistant Conservator of Forests

TO: Marketing Officer, Agricultural Department.

DATED: 15th March, 1945.

SUBJECT

(Lonchocarpus Utilis) - Barbasco Root.

I have the honour to acknowledge the receipt of your minute dated 13th March, 1945, and to advise you that Lonchocarpus Utilis is not known to occur in British Guiana.

2. Nevertheless, I submit the following which may be of interest to you:-

Barbasco is a name given to various plants in various regions; This is applicable to the following:-

The family Cannellaceae, species of the genus Canella; the family Compositae, species of the genus Claibadium; the family Leguminosae, species of the genus Basidia; species of the genus Lonchocarpus; the family Leganiaceae, species of the genus Buddleia; the family Rutaceae, species of the genus Dictyoloma; the family Sapindaceae, species of the genus Paullinia and species of the genus Serjania; the family Theophrastaceae, species of the genus Jacquinia.

3. Of the genus Lonchocarpus, there are about one hundred and fifty species of small to medium sized trees and scandent shrubs and lianas which occur in Tropical America, Africa, Madagascar and Australia.

4. The leaves are odd, pinnate with one to fifteen medium sized to large leaflets; the white, pink or purple flowers are born in simple or branched racemes; the pods are flat, broadly ovate to narrowly elongate, stiputate thin to leatherly indehiscent, and usually with one to four seeds.

5. The trees are common on open hillsides and dry plains to low and moderate elevation in Tropical America and have very little economic value for their timber, though the hardest kinds are used locally to a minor extent for implement frames, spokes of logging cart-wheels and some heavy constructions.

6. The roots of some of the South American shrubs and climbers are used to stupify fish and have a commercial source of Rotenone for making insecticides. The bark of one or more Yucatan species has long been used to make a fermentative berverage, called "Balche".

7. The Heartwood is yellowish brown to dark yellow brown with Paronchyma laminations of lighter colour; apparently late in developing in most species, are usually absent from small specimens, sharply demarated from the thick yellowish Sapwood, lustre medium, odour and taste absent from dry material moderately to v very hard and heavy, generally very tough and strong; specific gravity (air dried - 0.70 to 0.95; weight - 44 to 59 pounds per cubic foot) texture coarse to very coarse; feel - harsh; grain - irregular; not easy to work inclined to be splintery though there is a considerable range in the working properties; durability of a dark coloured material good, apparently without commercial possibilities.

8. In British Guiana, species of this genus are known as Aya, Haiari and White Haiari.

Yours sincerely,

(Sdg.) J. Henry Hughes,
Assistant Conservator of Forests.

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Yours sincerely,

(Sgd.) J. Henry Hughes,
Assistant Conservator of Forests.

The RUPUNUNI.

Under modern development and fast means of transport few peopl can visualise today what were the hardships, the isolation, the lonliness and the riskin life of the pioneer who ventured into the Rupununi District towards the close of the last century, or even during the two first decades of this century,

To reach the Southern Savannahs from Georgetown with a fully loaded boat meant a minimum of fully four weeks of steady travel and hard work, paddling againt a stiff current (then the only means of propulsion), manhandling the boat and cargo over innumerable falls and rapids; clearing a site and erecting some sort of a shelter each night as also the necessity of living off the country you were passing through; providing, at least, all the protein foods for himselfand his men since the salt beef, porkp or fish would have taken up all the cargo space of the boat, and even then would not have been eaten by the Indian crew - the only people who at that time able or qualified to find the way upcountry.

The Southern Savannahs can only be reached bt river during the rainy season between mid-May and mid-August with any definite assurance and it was during this season that the pioneer down his boat, manned by a dozen Aboriginal Indians, for annual supply oftrade goods and such luxuries for himself as he fancied or could afford. I place "trade goods" first as none of the pioneers could afford to buy muchthat could noy be turned tn account in the payment of wages or in some trade that would recover the initial expenditure.His so-called luxuries amounted ta 40lb tin of sugar; 6lbs tea and possibly a 59 lb tin of flour per annun. a certain amount of necessary footwear and clothing - otherwise he had to live largely on his own resources;hunting- fishing,and fomm fields of his own ltanting.

One trip to town each year was all that the settler could afford and such trip was made as short as possibl e His Indian boathands naturally had to go town to draw their wages and once they had spent their money were simplt crazy to set out for home again. The alternative was to give them more money, which in all probability yhe settler did not have, as alreadt he wouldhave purchased trade goods to the full entent of his available cash and credit. His own private expenseswould not run to more than fifty dollars fo hotel expsnses and a few amenities.

Such a modest sum could not be classed as an exorbitant premium or profit extorted from the Indians for one whole year spent organising and encouraging their Arts and Crafts and providing a range of barterunobtainable nearer than Georgetown, or as a last resort in Brazil from whence they had, not too long ago, migrated --- the reasons for which still being a rather painful memory. There was no case of the Indian being exploiteg. far from it; every man in

the tribe knew exactly what he wanted for any specific article and if he did not get it, he just would not sell. The Aboriginal is not quite as simple as the Storybooks try tn make out and any trader who who tried to beat down prices or not come up to tribal standards might as well pack up and go as wprd or any disreputable deal woyld be passed round the tribe witn almost magical speed via their method or teltpathy.