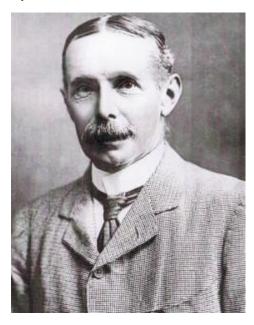
The Inflorescence of the "Nilu" (Strobilanthes)

By Thomas Farr (1910)



## (Re-write by PMR)

Thomas Farr, who was know and who signed as "Thos.Farr" was born at Frostenden, Suffolk in 1850. He sailed for Ceylon (Sri Lanka) in 1870 where he worked as a planter till he retired in 1912. He died at Chittlehambolt Manor in 1919.

Thos. Farr was a great sportsman who possessed exceptional knowledge of wildlife in this country. He contributed immensely to the preservation of wildlife in Sri Lanka. He was Hony. Secretary of the Ceylon Game Protection Society from 1901-1904.

His bungalow built in 1901 at Horton Plains in now being used as a rest house by the Ceylon Hotels Corporation. Its chimney still carries the inscription "T.F. 1901".

This interesting article on the flowering of the Nilu written by Thos.Farr in 1910 was given by his son E.T.C. Farr for publication in the Journal of the Ceylon Game Protection Society.

----- The Inflorescence of the "Nilu" (Strobilanthes) ------

There are to be found in these upland forests about 4000 ft. up to 8,00 ft. in elevation, some nine or ten species of Strobilantes; these flower abundantly every twelve years and after seeding, die-off, root and branch and the periods of their inflorescence are as regular as those of annuals and bi-annuals.

Two, species, Strobilanthes sexennis (misnamed no doubt by the botanist who first classified them) and S. pulcherrimus, are so regular that except for an odd spray of bloom in the year before its universal flowering, one may search in vain for eleven years without finding a single blossom. I

have, however, once seen a bush of sexennis in full bloom standing out in four year old nilu, miles from its proper district, but this must have been due to the seed having been carried there by birds or rats.

The most conspicuous of the nilus are Strobilanthes sexennis, S. pulcherrimus, S. viscosus, S. calycinus, S. hookeri and S. walkeri, and with the exception of the two first named, plants may be found in flower here and there every year. These are probably bushes flowering out of season with their environment, but grown from the seed of another nilu district, and conveyed there by rats and birds: death invariably follows the periodical inflorescence.

The first nilu in order of its flowering in sexennis, ma

uve in color, and this is the only one that attains to the dignity of a tree. In sheltered hollows of good soil, it may be found with stems 4 ½"in diameter and often from 20-30 feet in height. For some months previous to its inflorescence one may notice the approaching advent of the blossom in the form of small narrow leaves and shoots at the ends of the branches: and in July of its twelfth year, spray of the lovey mauve flower may be seen here and there in the jungles of the lower slope at the elevation of 4,000 feet.

Gradually the buds develop and as gradually the blossom opens, sparsely first, and then as July gives way to August as short break in the prevailing gloom of the S.W. monsoon occurs, the jungles begin to show a distinct tint of purple and mauve below the canopy of the forest trees.

By September the undergrowth has ceased to be eternally and monotonously green and the colors of a profusion of blossoms attract the eye upon all sides.

The edges of the forests along the boundaries of patanas or open stretches of coarse grass and swamp, especially upon the sunny sides of them, are now of a lovey delicate shade of vivid color and amongst the mass of bloom may be seen the golden yellow sprays of the Crotellaria walker climbing up into the dark foliage of the forest trees, whilst the brilliant flowers of the Osbeckia rubicunda and the O. buxifolia flash out vivid patches of pink and crimson. High up among the blue-green foliage may be seen the sweet-scented, cream-coloured flower of the sapu, like miniature magnolias, shedding it exquisite perfume far and wide. Stately kina trees crown all the undergrowth with their glossy dark green foliage surmounted by deep red young shoot and fringed below with silvery lichens.

Now begins the summer of the N.E. monsoon; the cold wet mists and 'the winds, that will be howling at all hours and are upgathered now like sleeping flowers,' give way to blue skies and brilliant sunshine, and all the nilu burst almost simultaneously into full inflorescence. Already the hop-like greenish-white calyx of S. calycinus with its brilliant canary yellow trusses of bloom show up on their spreading rounded-topped bushes reaching up into the lower branches of the jungle trees.

Then on ridges where soil is poor and sunlight abundant, S. viscosus with its pales mauve bloom almost shading to white, much scented and sticky to the touch, adds its multitude of delicate little blossoms; and with it, in all its glory of pink of many shades, open the marvellously beautiful sprays of S. pulcherrimus.

Now as the sunny October and November mornings, followed often by a drenching shower of rain, lend their genial warmth in aid of Nature's mighty effort, the whole jungle undergrowth presents an extraordinary exhibition of color. Dar heliotrope and white, canary yellow and palest mauve and shades of delicate pink, all blended as only the hand of nature can blended the flowers of forest and field into one harmonious whole.

The rosy beauty of S. pulcherrimus is enhanced by a pink pubescence, which, touched by oblique shafts of light from the morning sun through the tree stems, send forth rosy gleams of color, whilst each hair of its pubescence holds a sparkling jewel of dew or moisture from the mists of night. The effect is ethereal and entrancing, 'like fairy lands' is a description often given it, as through veils of transparent gauze were draped through and about the nilu stems as far into the forest as the eye can penetrate.

Along the forest glades and paths is seen a vista of loveliness, broken here and there by gracefull fronds of the trailing bamboo, Arundinaria, and low down upon the banks and near the ground are dwarf varieties of pale purple and pure white sexennis, but of a much darker shade of purple, grows to a height of some eight to ten feet. Higher up on the exposed slopes great patches of color break out from the prevailing green like heather on the rugged slope of Scottish moors. The foliage of some of the larger nilus have a rich claret-colored under-surface, and this especially noticeable in the younger stages of growth before their inflorescence.

One of the most remarkable features in the distribution of the different nilu districts or tracts in their boundaries. These are almost invariably as straight as if they had been defined and marked out by the hand of man. One of these boundaries may be seen at the top of Totapela zigs, crossing the bridle path running east and west, and another crossing the same bridle path some four miles further west, also running east-west. Between these boundaris may now (1910) be seen a tract of six-year old nilu, broken only the patanas of the Horton Plains. There area many of these districts or tracts of nilu, and in almost every instance two or more of their boundaries run straight over hill and dale, some extending for many miles.

This year's (1910-1911) inflorescence is know to the natives as the "Maha Nilu" or the great nilu flowering, and with the exception of the six-mile break and a break of about a mine near Mile's Patana, it reaches roughly from Adam's Peak to Pedro and beyond to Pundal Oya. The six-mile, or World's End district, to which I have referred above, flowered in my experince in 1881-82 again in 1905-1906 and it will flower gain withou fail in 1917-1918.

Another tract of flower will be found in 1911-12 on the Bopats, and another near the four milepost on the Black Pool-Ambewela bridle road, will flower about 1918-1919. I forget the exact year.

The foregoing facts and figures clearly prove the regular twelve years period of the inflorescence of the up-country nilus, and the presence of jungle rats, Golunda ellioti, or coffee rat and two eat

other tree rats in gardens and cultivated The land generally is a sure sign of its approach. A more conspicuous harbinger of this effort of nature, a however, is the Bambara bee.

As early as August, whilst the S. W. monsoon winds still hold their's way over our upland plateaus and the heavy masses of moisture-laden clouds still sweep round the forest-clad hill-tops, the Bambara bees are already on the wing in search of the rich store of honey that instinct tells them is there for the gathering. In steady flight from the precipices of dry and sunny Uva, where their combs may be seen hanging from the sheltered eaves of the inaccessible crags of the Bee Rocks, as they are called, the Bambaras, by some wonderful instinct steer a bee-line towards the flowering nilu tracts.

Across open patanas and against opposing winds I have seen them labouring towards their goal. Beaten down by heavy showers they cling to blades of grass or small jungle growth, almost hibernating during the intense cold of the night, and as the morning sunbeams dry their sodden wings, they a continue their unerring flight. It is probably the scent of the nilu flower that guides them over these miles of - rugged country, combined with a marvellous instinct.

Doubtless multitudes of them are killed by the cold and wet on their journey.

Numerous swarms of bees too are a feature of sunshiny days at this time, and the restlessness of travel, pervades them in their multitudes. I have seen as many as ten to twelve swarms hanging from the branches of a single tree, waiting for a hot sunny day to continue their flight

Where the tea estates march with the forest, these bees become a source of danger to the coolies. The Bambara is peculiarly aggressive and numberless cases have occurred in Ceylon of planters having been badly stung by them. Horses too have been attacked.

Another source of danger in this connection is the Indian honey buzzard, Pennis ptilonorhynchus; this bird moves up to the vicinity of the flowering nilus, and when in search of its favourite food, so irritates the bees that they will chase it for miles, although they seem quite unable to inflict any serious harm upon it. The lores and the peculiar structure of the feathers of the bird's face seem to be adequate protection against the stings of even the powerful Bambaras. Harmless pedestrains as well as equestrians come off badly should they happen to fall in with the bees thus infuriated, for they attack on sight.

So far-reaching is the effect of this remarkable inflorescence upon the beasts and birds of these wild forests and grass undulations that even the mighty elephant bows to the inevitable and obeys the new laws that Nature is making.

As the honey-combs increase in size and numbers upon the overhanging limbs of forest trees, the elephant as he walks through the thick undergrowth, brushes them with his back or pushes swaying saplings against them, with the as result that he is furiously attacked, and having a sensitive epidermis he suffers severely. With this knowledge and instinct he requires but gentle hints to move to safer retreats far from "busy hum of men and bees."

With the departure of the elephant from the nilu jungle comes the sambur deer, Rusa aristotelis. The timid nature of the deer causes them to shun the forests occupied by the elephants, and they change their feeding ground according to the movements of the noisy pachyderms, noisy only through their bulk and weight as the move through the undergrowth as cows move through a field of beans. The sambur stag, as he lies on some lofty ridge or peak during the hours of daylight is aroused from his slumbers by the breaking of the trees and saplings as the elephant pushes his resistless way through the undergrowth or by the "crack crack?"

of branches pulled down as he feeds. This cause of constant and irritating disturbance having been removed, the sambur and red deer feed in peaceful security undisturbed by sudden alarms.

The number of leopards then fi increases in these particular forests, the deer are more easily approached in the glades and game paths owing to the fall of the nilu leaf in its approaching dissolution. The leaves in the dense shade soon become soft from decay and even in dry weather may be trodden on without a rustle, so the stealthy cat approaches its victim.

For some months before this movement of bees and the wild animals I have recorded above, takes place, the observer of bird life is often puzzled, to account for the presence of jungle-fowl, Gallus Lafayetti, in unaccustomed places. I have seen them in the nilu year in numbers on the Nuwara Eliya racecourse. I have seen ten or more at a time on the Government cart road within sound of the Maskeliya kaddies. Jungle-cock have flown into fowl-runs attached to bungalows, and have roosted in the grevillea and cypressus trees of the flower gardens. They have appeared at odd times in coffee and tea fields, in the belts of scrub and jungle the left to demarcate fields or to break the force of the winds. I have seen a jungle hen fly up into an orange tree to roost within fifteen feet of my front door. Upon one occasion I was out on the Bopats early in the morning with my old friend and brother sportsman, Edward Torkington, now, alas, gone over to the majority, and we saw roosting upon one tree on the forest edge as many as twelve or more jungle-cocks, their lovely plumage flashing a blend of red, yellow, bronze and metallic blue in the rays of the morning sun. These later birds had reached their destination and were at home for the nilu was in full flower around them.

But what were the others doing in such strange places? They were trekking, moving from the low-country chenas and grain fields towards the flowering nilu to fatten themselves on the bounteous supply of seed that this wonderful inflorescence produce; and it is only in what we call nilu years that these occurrences take place. The wonderful instinct that guides birds over miles of country, cultivated and uncultivated, is a subject of much discussion amongst observers of natural history phenomena and many theories are duly aired and argued. The scent of the blossoms is far-reaching and pungent and probably attracts the bees, but the jungle-fowl and bronze-wing pigeons come from all directions, upwind and downwind. In the case of the jungle-fowl the challenge of one cock to another on the lower slopes of the hill-country and so up to the highest ranges, may draw them upwards.

The "George Joyce" call may be heard half a mile or more in the still morning air, as each cock sends his challenge down the jungle-clad valleys, for every jungle has a few birds at all times and seasons, as many as there is food for, and the challenge is repeated again and again and is passed down thousands of feet to the paddy fields below, and so the "trek" begins.

But how about the soft coo of the F little bronze-wing pigeons? During February, March and April the nilu jungles resound with their gentle murmering coo. They appear like magic, to feed on the seed and disappear in May equally mysteriously. The Lady Torrington pigeon too collects in increasing numbers in the nilu jungles. These latter birds are, however residents of the hillcountry where they find ample food at all seasons, feeding on fruit of the Kudadawala, wild cinnamon and other forest trees.

Then, too, the blackbirds leave the peach and orange trees of our gardens and are no longer to be seen searching our lawns for the early worm, or feasting on our strawberries. The familiar song of earliest morning and late evening, so reminiscent of an English spring or early summer, suddenly comes, for they too flock to the nilu-clad hills where they congregate in immense numbers. During March and April at five o'clock in the morning the song of hundreds of blackbirds may be heard through the forests as well as the plaintive whistle of thrushes and the merry piping of the blue-flycatcher, "the whistling ploughboy"; but in May they return once more to civilisation, to their favourite roosting places and familiar haunts amongst the rose borders. When there is no nilu to attract them away they remain in the garden and hatch out and bring up their broods; and morning and evening their song is a joy.

These birds too by some subtle instinct find out the harvest awaiting them. No wonder then that birds of prey and wild cats gather in larger numbers than usual. Their harvest too has come in the form of a sudden increase of bird life in a more or less circumscribed area. The stately black eagle, Neopus Malayensis, with powerful sweeping flight, searches round clearings and open land for his prey, sailing just over the tree tops, ever wary of the sportsman's gun. His six-foot expanse of wings suddenly j attracts the eye, and there is no mistaking the upward sweep of the points of his pinion feathers, separated and distinct like the expanded fingers of a man's hand.

The crested eagle and the crested in falcon, "raptores, "both of the boldest type are now much in evidence. The former makes bold flights upon early morning jungle-cocks as they dry their brilliant plumage on the sunny sides of patana slopes, where the hens are choosing dry nesting places amongst the tussocks. The wary falcon appears high above the tree tops, his beautiful recurved wings outlined clearly in their typical form and sweep against the ay cloudless sky. Beneath him and his businesslike soar and stoop you may hear the note of alarm of cock and hen, supplemented by the resounding cry of the rock squirrel as the shadow of his wings pass over it.

The crested goshawk, the hobby and the sparrow hawk, as well as the small Indian goshawk, are all alert for food, and many a blackbird, thrush and bush chat falls a prey to unerring eye and swift bold dash from some tree top.

The brown owl and the fish owl take their toll of the increased life in the jungles. The wood owl snaps her bill and rolls her bright yellow eyes as she watches her chance at the unsuspecting rats which now begin to gather for their harvest of nilu seed. Our gardens are infested by these hungry hordes taking toll of our beans and bees as they trek upward to the nilu forests, and then, when the S. W. monsoon, in June envelops the hills in dense clouds and the pitiless rain sweeps cold and paralysing through the dead nilu stems, a general dispersal begins.

The rats return to lower altitudes to avoid the biting blast of the wind, leaving behind them on exposed patanas many victims to the elements. They halt in our bungalows, stables, outbuildings and sheltered gardens and attack everything edible that comes their way. Oranges and peaches are eaten on the trees themselves, as is clearly evidenced by the fragments of fruit strewing the ground below. Carnations and Shirley poppies seem a favourite diet as well as tea seed and blossom. In the old coffee days, these insatiable rats would climb the stems of young coffee trees and then running along the lateral branches to as far as they would bear their weight, they would bite off the ends bearing bud and blossoms, and upon the latter they would feed. In our gardens the quantities of carnation and poppy blossom they devour is extraordinary and they are partial to phloxes.

There are four or more variedtis o these rats, the coffee rat, Golunda eilliotii Grey, short-tailed and rough-coated, Nesotria providence, sterndale, that in common with the bandicoot rat, does much damage to the roots of tea bushes and in tea nurseries in very destructive, gnawing through the roots growing plants.

Another Mus rufescence, this rat has an abnormal long tail exceeding the length of its body, and it is as large a young bandicoot. These rodents all collect for the nilu harvest and disperse when it is over to 'fresh fields and pastures new, and until the next flowering are no more to be seen in any number, and our gardens are left in peace. The house rat of course it always with us and a few of the field rats, but the damage they do it hardly noticeable.

Simultaneously with the flitting of the rats, the jungle fowl begin to descend the jungle clad slopes of the higher ranges impelled thereto by the rigours t of the climate and the sudden-disappearance of the food supply. Whole broods of young birds cockerels and pullets, may now be found in our tea fields and gardens.

These birds are occasionally old bird, accompanied presumably the mother, but I have never flushed any old cock with them. The instinct that brings them down some 3,000 ft. towards the hot plains, whence their parents emigrated six or seven months before, is little short of marvellous, and until the next nilu flowering, they too like the rats are seen no more.

The pigeons and blackbirds have already gone and the jungles for a short f space are abomination of desolation. Howling winds rage and roar through s the forest trees, and the dead nilu stems are blown down in masses criss-crossed with each other, bare, rotten and leafless. The sodden ground gives forth e a noxious smell of decayed and decaying vegetation, the song of birds gives place to "cluck! cluck!" of innumerable tree frogs, and saturated Nature becomes inert in the chilling dampness of the atmosphere.

There is, however, something that attracts the eye of the observer as he glances amongst tree stems that for twelve years have been invisible at a distance of six feet. A tiny growth is appearing among all this death and decay. Out of the sodden earth, amongst dead leaves and twigs and recumbent rotting stems, a young growth is springing up. A fresh green covering to the brown earth. This is the birth of the young nilu for its twelve years' sojourn, springing up in its damp environment and soon to assert itself in its luxuriance until all other undergrowth except the hardy bamboo, arundinaria, shall be obliterated and smothered.

For a short period of a year or two - we shall see the mossgrown stems of the forest trees perhaps for a distance of fifty yards from the bridle road, and then the young nilu foliage will hide them up to their lowermost branches, and six years hence we shall once more cross a well-defined boundary and find ourselves feasting our eyes on the glories of the new florescence.