

Revised Edition —

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# Coconut Research Board



Leaflet No. 28

CONTROL OF ILLUK



*A stand of illuk in flower*

One of the first colonisers of cleared or abandoned land is illuk. Prompt action must always be taken to eradicate this weed before it can get itself established. If it is left too long, its eradication becomes progressively more difficult, laborious and expensive.

### **Propagation and establishment :**

The seeds of the illuk plant are wind borne, therefore the dispersal can be wide spread. Once established, illuk grows rank, with a mass of matted rootlets connected by lone runners of underground stem. The growing tip of the stem has a sharp, unyielding bayonet point. A single plant may have several such growing points.

## **METHODS OF CONTROL**

### **Burning :**

Although burning is a common practice, it is not recommended because the residual fertility in the soil as a result of the burn will cause subsequent growth of the unburnt, underground, illuk rhizomes and produce more aerial growth.

### **Soil Cultivation :**

(a) Hand digging — The most effective method of controlling illuk is by digging it out with mammoties and removing the underground stems. This is very laborious but very effective, especially, if all bits of underground stems are carefully picked out and burnt. Every small portion of the stem with a node is capable of growing into a new plant, therefore, it is best if the picking process is carried out at least twice after the first digging.

(b) Ploughing — should be carried out towards the end of the rains. The ploughing will expose the roots to get dried in the sun. It has been observed that there was a marked difference in illuk growth between ploughed and unploughed plots: it was checked in the ploughed areas. Following the ploughing it is advisable to work a spring tine harrow in cross-wise directions to expose more of the underground stems which when lifted above ground will get sun dried. This method of control is practicable and effective if the operations can be repeated several times.

(c) Harrowing — Prior to ploughing, harrowing is helpful to crush the top growth and facilitate ploughing. Harrowing alone may be inadvisable because by so doing the underground stems get cut into sections that commence new growth and thereby increase the incidence of illuk.

### Use of Cover Crops :

Illuk does not like shade, therefore, quick growing cover crops can be used in illuk control. **Tephrosia candida (Sinh. Bogamedilla)** was grown in one area that had been hand-weeded to free the area of illuk. In another area only hand-weeding was done. It was observed that the weed was controlled to a greater extent where the cover crop was grown. The suppression of illuk by means of an alternate cover should be a successful method of eventually eradicating the weed. Catch crops can also have similar beneficial effects.

### Mowing or slashing :

By mowing or slashing, the green aerial parts that supply food to the underground stems are severed. Repeated slashings, therefore, will starve the plant and ultimately result in its death. If this method is to be effective, slashings should be done frequently. Such an operation is feasible only in small areas. Slashing is of no avail if it is not repeated and the illuk stand is allowed to flower.

### Grazing :

Young illuk is eaten by cattle, particularly, buffaloes. Buffaloes can be made use of to control illuk, if they can be fenced in, in illuk infested fields where coconut seedlings are not present.

### Weedicides :

Weedicides prove economical where labour is expensive, Selective weedicides that kill grasses may be effective but no trials have been done to make a recommendation. It has often been asked whether sodium arsenite could be safely used. It being

a total weedicide can kill not only all types of weeds but even other plants and animals. Hence the hazards are heavy. Chemical weed killing has not yet been studied fully and no recommendations are available.

**A summary of the recommendations :**

(a) In young plantations, the growing of catch crops and cover crops should be possible. The illuk will then have no chance to get established. Catch crops such as cow-pea and green gram can be mentioned as suitable if sown at the correct season.

(b) In old plantations, the soil cultivation and grazing with buffaloes should be the methods of control that are practical, effective and economical.

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