seeds. Blue light has been suggested to amplify the fresh synthesis of RNA and soluble proteins. The inhibition by cycloheximide suggests that mostly pre-formed mRNAs are translated on the polyribosomes to yield the active enzyme. It has been shown that light-mediated increase in the amount of polyribosomes consequently promotes nitrate reductase activity.

Exogenous supply of hormonal substances in the incubation medium of embryos in the dark affected enzyme activity (figure 1). GA$_3$ enhanced nitrate reductase activity to the same effectiveness as on 5 min irradiation with blue light while benzyladenine was more effective. Ethrel slightly enhanced the activity while IAA had no effect. Cytokinins per se enhance the activity of nitrate reductase in Agrostemma embryos caused by de novo synthesis and markedly enhance the efficiency of nitrate reductase induction by substrate in many plant species. In tobacco leaves, GA$_3$ and a combination of GA$_3$ and kinetin enhanced the activity of nitrate reductase and replaced the light requirement for its induction.

The question as to whether light effect on nitrate reductase activity is mediated via changes in hormone concentrations or balances or via membrane(s) changes or functions affecting responsivity to hormones, is still open.

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BIPOLARIS SPICIFERA AND EXSEROHILUM ROSTRATUM CAUSING LEAF SPOTS OF EUCALYPTUS TERELOCORNIS — NEW RECORD FROM INDIA

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Foliar infection of 3-month-old Eucalyptus tereticornis Sm seedlings was observed in forest nurseries at Onkar, Mysore, Karnataka during April/May 1984. Infection occurred usually at the margin and tips of mature leaves as minute greyish brown specks. The spots coalesced to form large necrotic areas. Two fungi, Bipolaris spicifera (Bain) Subram, anamorph of Cochliobolus spicifer Nelson (IMI 288286) and Exserohilum rostratum (Drechsler) Leonard and Suggs, anamorph of Setosphaeria rostrata Leonard (IMI 288285, 288287, 288288,
288290) were consistently isolated. The identification of the isolates was confirmed by the Commonwealth Mycological Institute, Kew, England.

**Bipolaris spicifera** (Bain) Subram

Colonies on potato dextrose agar (PDA) effuse, greyish to oliveaceous black. Conidiophores flexuous, densely geniculate up to 220 μm long. Conidia oblong—ellipsoidal to cylindrical, golden brown to brown, smooth-walled, 2–3 (mostly 3) distoseptate, 17.5–28.5×6.6–10.5 μm, end cells small, hilum inconspicuous, germination bipolar.

**Exserohilum rostratum** (Drechsler) Leonard

Colonies on PDA effuse dark greyish to oliveaceous brown. Conidiophores solitary, straight or bent, golden brown, geniculate towards the tip 35–120×6–7.5 μm. Conidia fusiform—cylindrical to obclavate, with a markedly protruberant hilum at the base, pale yellowish brown to dark brown, often with strongly rostrate tip, 5–14 distoseptate, 49–187 μm long and 11–15.5 μm wide at the broadest part (figure 1).

Pathogenicity of the isolates was confirmed by spraying conidial suspensions of *B. spicifera* and *E. rostratum* separately on detached leaves of *F. tereticornis* floated on 5 ppm benzimidazole solution and reisolating the respective fungus from the lesions developed.

Various nursery diseases of eucalypts have been reported recently from Kerala1–5. *B. spicifera* being reported on *Eucalyptus* for the first time, is a cosmopolitan species recorded from over 77 different plant species, including 51 genera of grass6, 7. It has been reported as causing cotton blight, leaf blight of tobacco8, seedling diseases of sugar cane9 and paddy leaf spot10. Leonard and Suggs11 erected the form genus *Exserohilum* for species formerly included in *Drechslera sensu lato* or *Bipolaris* Shoem where the conidia are characterized by a distinctly protruberant hilum. Recently, a taxonomic revision of *Exserohilum* has been made by Leonard12 and Sivanesan13. *E. rostratum* is a new record from India. *Bipolaris rostrata*, a species closely related to *E. rostratum*, has been recorded on paddy causing leaf spots, and on wheat foot rot14–16.

We are grateful to Dr Sivanesan, CMI, England for identification of *Bipolaris* and *Exserohilum*.

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*Figure 1 a–b. Conidiophore and conidia of *Exserohilum rostratum*. Note the markedly protruberant hilum at the base of the conidia (a) and germinating conidia (b).*

**RECORD OF THE POLLINATING WEEVIL**

**ELAIDIOBIUS KAMERUNICUS (FAUST) (COLEOPTERA : CURCULIONIDAE) IN OIL PALM PLANTATIONS OF KERALA**

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The red oil palm *Elaeis guineensis* Jacq, a native of West Africa, was introduced to several of the South East Asian countries such as Malaysia, Indonesia, India etc. In these countries, the inadequacy of pollination has been a major problem. Besides the low rate of fruit setting, sometimes lack of adequate pollination also results in bunch failure. Hence efforts are being made to evaluate the role of different species of insects visiting the male and female inflorescences of oil palm and to identify the ones which are beneficial pollinators. Recently certain curculionid weevils were observed in large numbers on the inflorescences in the oil palm plantations at this institute. These weevils were identified as *Elaeobius (= Prosoestus) kamerunicus* (Faust) (Coleoptera: Curculionidae) belonging to the tribe Derelomini of the subfamily Erirrhini-nae (figure 1). A survey revealed the occurrence of the same in the oil palm plantations of Chithara, Kerala.

*E. kamerunicus*, one of the most important pollinating agents for oil palm in Cameroon, has been successfully introduced and established in oil palm plantations in Malaysia by the middle of 1981. Over the first seven months of 1982, bunch weight was 10% above the mean for the previous five years in Kluang and 35% above in Sabah. Total yield was 20% higher in Peninsular Malaysia and 53% higher in Sabah.

The weevils chew anther filaments of opened male flowers. When they crawl or move about on the spikelets the pollen grains adhere to their body and during their subsequent visits to the female inflorescences the pollen grains are deposited on the stigma of female flowers. When the weevils crawl over the male inflorescences a large amount of pollen grains are disbursed which are carried by wind.

![Figure 1. Elaeidobius kamerunicus (× 300).](image-url)