Nigrospora oryzae may have a preference to blast lesions for its colonization due to a specific nutrition available in the blast lesions of rice. The conditions under which the other less virulent fungi exist within the lesion are determined in part by the host and in part by the disease-inducing pathogen[3]. This may be the reason for the high spore load of *Nigrospora* in the air.

Nigrospora oryzae which is known to produce toxic metabolites[5], may function as a natural antagonist to *Pyricularia oryzae* by limiting the blast lesion development. *Nigrospora* has been found to inhibit the development of the lesions induced by *H. oryzae*, and suppress the enlargement of lesions induced by virulent pathogens[2].

The nature of the nutrition available in the blast lesions that attracts colonization of *Nigrospora* needs further study. It may be stated that *Nigrospora oryzae* serves as nature's device to limit the spread of blast lesion in rice.

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EFFECT OF METHYL ISOCYANATE ON REPRODUCTION IN RATS

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METHYL ISOCYANATE (MIC) is a highly reactive chemical causing multiple damage to lungs, eyes and skin[1]. Numerous reports have appeared following the Bhopal tragedy emphasizing that the major site of action of MIC is the respiratory tract[2].

Information on the effects of MIC on other organ systems is scarce, possibly due to the belief that it lacks extrapulmonary toxicity[3,4]. MIC has, however, been found to be toxic administered by oral and subcutaneous routes, possibly affecting organs other than the lung[5]. This is of relevance since MIC has been reported to cause damage to extrapulmonary organs like liver, kidney, gastrointestinal tract and heart muscle after a single exposure[6]. The present communication deals with the effects of a single dose of MIC on reproduction in rats.

Six to seven-month-old Albino Wistar rats of both sexes with proven fertility weighing 155–196 g were used. Fertility studies were carried out following essentially the methodology described in the literature[7]. Briefly, female rats showing six regular oestrus cycles prior to treatment with MIC, were selected for the study and the male rats were put for mating after 70 days following administration of MIC.

MIC (99% pure) diluted in olive oil was injected subcutaneously (s.c.) at a dose level of 2/3 LD_{50} (LD_{50} of MIC: male rats 328 mg/kg; female rats 261 mg/kg s.c.[5]). The s.c. route of administration has been preferred since the rate of absorption of an agent injected by this route is considered sufficiently constant and slow to provide a sustained effect[8]. The treated females were mated with untreated males and vice versa in the ratio of 3:1 and 1:1 respectively. The parameters investigated were the periodicity of oestrus cycle, receptivity, fertility and gestation period in female rats; virility and spermatogenesis in the male rats (adjudged by their mating behaviour and fecundity) and litter size, litter weight and neonatal survival during lactation of the pups. The gross effects on reproduction in F2 generation were also studied. The results are given in table 1.

Food intake and gain in body weight was normal in MIC-treated rats as compared to the control group. There was no adverse effect of MIC on reproduction as shown by various parameters studied. Pups born out of the mating of treated parents also exhibited normal reproductive behaviour on attaining puberty. Since the overall time of spermatogenesis extends to over 9 weeks in rats, the present study extending for 12 weeks after treatment with MIC would have revealed possible effects on any stage of spermatogenesis[9,10]. However, there was no adverse effect.

As this report was being prepared, the effect of inhaled MIC (4 exposures) on fertility in mice appeared as proceedings of a symposium in which again the authors did not find any significant adverse effects in mating trials in mice[11].

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Table 1 *Effect of MIC on reproduction in rats*

Description of groups of animals	Receptiveness in female rats	Virility in male rats	Fertility	Total number of pups born	Litter size (numbers)	Body weight of pups (10–12 h old) (g)
Control		+	+			
male ($n = 2$)	+		+	39	6.50 ± 0.76	6 01 ± 0 36
female ($n = 6$) (1:3)"						
Treated males ($n = 6$) mated with		+	+			
untreated females ($n = 6$) (1:1)"	+		+	46	7.66 ± 0.49 NS	5.12 ± 0.33 NS
Treated females ($n = 6$) mated with	+		+	41	5 85 ± 0.72	6 53 ± 0.74
untreated males ($n = 2$) (1:3)"		+	+		NS	NS

Values are mean ± SE; NS = not significant, compared with control group; " Mating ratio = male:female; The periodicity of oestrus cycle (6 cycles) was normal in all cases. The gestation period was 21–23 days and the neonatal survival was 100%.

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ACTINASTRUM HANTZSCHII LAGERHEIM VAR. *INTERMEDIUM* TEILING FROM INDIA

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SINCE the establishment of *Actinastrum hantzschii* Lagerheim var. *intermedium* Teiling by Brunnthaler from Sweden, it has been reported by Salim from polluted pools of Lahore in West Pakistan[1]. The present alga was collected from a polluted pond in Bakrol near Vallabh Vidyanagar in Gujarat during December 1986. This is the first report of its occurrence in India.

The present planktonic form was found growing along with species of the genera like *Raphidiopsis*, *Oscillatoria*, *Microcystis*, *Anabaenopsis*, *Merismopedia* and *Scenedesmus*. The temperature of the pond varied from 15 to 23°C. The pH ranged from 7.8 to 9.2.

Actinastrum hantzschii Lagerheim var. *intermedium* Teiling (figure 1)

The present alga is colonial, usually with 4 to 8 cells radiating from a common centre. Cells broadly spindle-shaped with a tapering hyaline tip. Colonies 21–51 μm in diameter. Cells 12–25 μm long and 1.6–3.8 μm in breadth. Chloroplast parietal with a small pyrenoid.