population of diatoms of which *Asterionella* accounted for nearly 93 per cent, it is reasonable to believe that the colour of the water was a result of the dense occurrence of *Asterionella*. But to our knowledge *Asterionella* was not previously known to be a causative factor in the production of coloured water.

Bainbridge[1], while considering observations concerning the size, shape and density of marine phytoplankton concentrations, quotes several figures for concentrations of diatoms, chiefly for normal waters, obtained by various workers from different regions. The highest figure he quotes, for *Asterionella*, is 3·6 cells/mm.^{3} and observes that much higher figures of 31·6 cells/mm.^{3} for other naturally occurring diatom densities, as was found by Marshall and Orr[2] in the waters of Loch Striven for 1927, must be considered localized and of limited duration. The densities found by us, when compared with the findings of other workers, referred to by Bainbridge, do not appear to be abnormal for highly coloured water with localized concentration of diatoms.

Such high densities in this particular region and the particular time are probably due to the enrichment of the area of the sea water, near the river mouth, by nutrient salts from the mainland through the agency of the flooded river during the north-west monsoon, which sets in during the latter half of June and continues until early October.

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2,4-Dichlorophenoxyacetic Acid as an aid to Seed Production when widely separated *Solanum* Species are crossed

After repeated unsuccessful attempts to duplicate Swaminathan's[1] technique for overcoming the cross incompatibility between *Solanum* species, a study was undertaken to determine the causes of seed failure when widely separated *Solanum* species are crossed. This work showed that some pollen germinated in all attempted crosses between several tuber-bearing series of the genus. Apparently normal pollen tubes were even observed at the bases of *S. melongena* L. styles when that species was pollinated by *S. phureja* Juz. and Buk.

The work indicated that a failure in seed production following the crossing of widely separated *Solanum* species could be a result of a failure in fruit formation because too few seeds were present to stimulate growth of the ovary. Without fruit formation to provide the normal environment for development, the few seeds present would be unable to mature. Therefore, attempts were made to devise a method for stimulating ovarian development which would not itself inhibit seed formation. It was found that treating the ovaries 24 hr. after pollination with a drop of 3–6 p.p.m. of 2,4-dichlorophenoxyacetic acid (2,4-D) had the desired effect.

The results obtained from the cross of a diploid hybrid (*S. chacoense* Bitt. × *S. rybinii* Juz. and Buk.) × *S. stoloniferum* Schlecht., illustrate the value of the treatment. Several hundred attempted crosses of this parental combination yielded only three or four very small berries from the non-treated ovaries, whereas several hundred berries were produced by those treated with 2,4-dichlorophenoxyacetic acid. The berries from the non-treated fruit produced no seeds, but thousands of viable seeds were produced by the treated fruit. By means of this technique, viable seeds have also been obtained from several other wide crosses, and selfed seeds were obtained from hybrid clones of very low pollen fertility. Similarly, Fischnich and Lubbert[2] have reported that 2,4,5-trichlorophenoxyacetic acid was useful for producing seeds from difficult intervarietal crosses. However, these studies have shown that higher concentrations of the di- than of the tri-chlorophenoxyacetic acid were necessary to induce fruit formation in *Solanums*. Moreover, the indications were that the optimum concentration of the latter was sometimes inhibitory to seed formation. The full results of these investigations are being published elsewhere.

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Colour Vision of Three Albinos

In 1951 an albino woman was given anomaloscope tests[1] and it was reported that she had a marked deviation in red vision. Recently, two albino men have been tested. The three subjects are unrelated. Tables 1 and 2 indicate the abnormalities of colour vision found in them on the anomaloscope[2].

Table 1. Red–Green Test

Subject's sex and age	Deviation	Matching range
f; 50	6 × sigma to red*	1 × mode*
m; 25	4 × sigma to red	5 × mode
m; 51	8 × sigma to red	5 × mode

* Both tests, about 3 weeks apart

Table 2. Yellow–Blue Test

Subject's age and sex	Deviation	Matching range
f; 50	2 × sigma to yellow	<1 × mode
	<1 × sigma to blue*	<4 × mode*
m; 25	1 × sigma to yellow	4 × mode
m; 51	zero	>2 × mode

* Second test, about 3 weeks later

It will be seen that all three albinos had red deviations almost equivalent to simple protanomaly, while the two men also had enlarged matching ranges, but not quite large enough for them to be classed as extreme protanomals. In none of them was the red end of the spectrum shortened. It is invariably shortened in extreme protanomalous but not invariably in simple protanomalous subjects.

In the yellow–blue test the two men had large matching ranges. The woman had no defect on her