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Mohan C. Pande

4. Does "Notch" represent an altered biochemical sequence?

While conducting some anatomical studies with Nt leaves, a few leaf portions were inadvertently put in a jar containing strongly acetified solution of ferric acetate in absolute alcohol. Within a fortnight's time while green, chlorophyll containing parts of the leaf turned colourless, the notched area and streaks emanating from it turned brown-black.

This indicates a chemical reaction in the Nt area. Several possibilities exist to explain this phenomenon. The absence of chlorophyll from the notched area indicates the presence of either an altered form of the pigment or some other chemical not to be found in other tissues of the leaf. This altered pigment or chemical could be reacting with ferric or acetate ions in the solution. The altered chemical may be a carbohydrate or a protein.

If a gene based mechanism is accepted, then the reaction will have to be viewed either as a primary or a secondary product of the gene action. Further studies are necessary before a final theory is accepted.

Mohan C. Pande

BOSTON COLLEGE  
Chestnut Hill, Massachusetts 02167  
Department of Biology

1. Further studies on the synaptonemal complex of haploid maize.

Microsporocyte divisions of haploid maize were studied with electron microscopy. From zygonema to early pachynema, the central element of synaptonemal complexes was not present, while the two lateral elements were consistently observed. At middle pachynema, all of the