In one experiment rhythmic fluctuations appeared only after the leaf had been subjected to a 4-min period of darkness. It is inferred that the 4-min dark period was causally related to the subsequent photosynthetic rhythm.

Using benzene infiltration tests on the experimental leaves of different experiments it was found that the stomates were open when the photosynthetic rhythm was at its peak, and closed when the rhythm was at its lowest point. It is inferred from these data that rhythmic stomatal changes correlated with photosynthetic rhythms.

Literature concerning stomatal and photosynthetic rhythms is reviewed and a plausible mechanism is discussed.

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Retirement of Book Editor

It is with regret that we announce the retirement of Dr. Thomas H. Langlois from the position of Book Editor of The Ohio Journal of Science. Dr. Langlois has served competently in this capacity since May of 1957. His contribution to the Journal is greatly appreciated. A successor to this position has not yet been appointed.