compounds would complex with aminotriazole to a varying level and thereby either prevent its absorption into the cell or detoxify it or its derivatives inside the cell. In fact, it has been shown that amitrole forms complexes with proteins or amino-acids[14-16].

Similarly, the fact that certain metal ions like Fe^{3+} and Mg^{2+} at equimolar concentrations could also reverse its adverse effects (Table IV), indicates that amitrole possibly acts as a chelator to interfere with the normal utilization of Fe^{3+} or Mg^{2+} in the synthesis of proteins like cytochromes or pigments which in turn would effect the formation of lamellar membrane. The evidence in favour of this comes from the fact that these ions were found to reverse the observed immediate inhibition of the photo-synthetic and respiratory oxygen exchange reactions by amitrole[12]. Apparently amitrole seems to be very specific in complexing with certain metal ions, since the calcium and sodium ions have no such reversal effect on the herbicidal action of amitrole (Table IV).

In conclusion it can be seen from the data presented here that the observed low levels of carotenoid and chlorophyll pigments are only an effect on the development of chloroplast structure rather than its direct interference with their biosynthesis. Similarly the reversal of amitrole inhibition by several organic compounds may be due to their ability to complex with amitrole thereby either preventing its entry into cells or detoxify it inside the cells. The fact that certain metal ions could also reverse the amitrole effect substantiates this possibility.

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