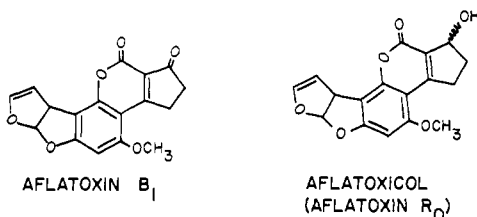


spectrum matched that reported by Detroy and Hesseltine (1970): ( $\text{CDCl}_3$ )  $\delta$  2.38–2.6 (m, 3 H), 3.31 (m, 2 H), 3.88 (s, 3 H), 4.80 (m, 1 H), 5.36 (m, 1 H), 5.50 (t,  $J = 4$  Hz, 1 H), 6.40 (s, 1 H), 6.48 (t,  $J = 5$  Hz, 1 H), and 6.80 (d,  $J = 7$  Hz, 1 H). The infrared spectrum has been previously reported (Schoenhard et al., 1976).

## DISCUSSION

Cole et al. (1972) report divergent extinction coefficients in the ultraviolet for the two diastereomers of aflatoxicol. The two diastereomers have identical traces in the UV, and differ only by the configuration of a saturated carbon bearing an unhindered hydroxyl. It seems unlikely that they should possess different probabilities (extinction coefficients) for identical electronic transitions. Both epimers gave maxima at 330, 260, and 253 nm, with absorbance ratios of 1.373 for  $A_{330}:A_{260}$  and 0.881 for  $A_{253}:A_{260}$ . For the front running (natural) epimer, we measured the following extinction coefficients,  $\epsilon_{\text{max}}$  9600, 6950, and 6400, and for the slower migrating epimer,  $\epsilon_{\text{max}}$  8220, 5950, and 5460.



Secondary allylic hydroxyl functions such as the hydroxyl in aflatoxicol are readily acid labile. In 50% dioxane-phosphate buffer at 22 °C, aflatoxicol racemizes with a half-life of 18.6 h at pH 2.1. Increasing the pH suggests that the racemization is 1.67 order in acid, rather than first order as expected (Streitwieser, 1956).

Garner et al. (1972) used sodium borohydride in 2-propanol to chemically reduce aflatoxin B<sub>1</sub> to aflatoxicol, but only reported a yield of 10%. Sodium borohydride in ethanol gave us very little, if any, aflatoxicol, which in itself is not surprising since this hydride is known to reduce double bonds when conjugated with an ester grouping. It appeared that this problem could be overcome by basic hydrolysis of the lactone ring in aflatoxin B<sub>1</sub> to its sodium salt, followed by sodium borohydride reduction of the ketone. Neutralization then recloses the lactone ring. This method also failed to produce aflatoxicol, yielding non-fluorescent products.

Ashoor and Chu (1975) used sodium borohydride in 85% chloroform. The double bond resisted reduction, but both the lactone and keto groups were reduced, yielding a trihydroxy product.

Sodium tris(methoxy)borohydride performs similarly to lithium tris(*tert*-butoxy)aluminum hydride but gives slightly inferior results.

## ACKNOWLEDGMENT

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## CORRECTION

PEROXIDASE ACTIVITY IN GOLDEN DELICIOUS  
 APPLES AS A POSSIBLE PARAMETER OF RIPENING  
 AND SENESCENCE

In this article by Natalio Gorin and Frouwke T. Heidema [*J. Agric. Food Chem.* **24**(1), 200 (1976)], on p 200, the last line of column 2 should read "the phosphate buffer (pH 7) (1.8 ml), 67 mmol/l. phosphate buffer (pH 7) (1.0 ml), an aqueous solution".