

Letters to the Editor

Dear Sir:

Earlier, we reported that cottonseed pigment glands, believed previously to rupture when exposed to aqueous media, remained intact in 80-100% saturated solutions of Na_2SO_4 and certain other salt solutions of high ionic strength (L.L. Muller, T.J. Jacks and T.P. Hensarling, *JAOCs* 53:598 [1976]). Recently at cool temperatures (ca. 20 C), we observed rupture of glands in concentrated solutions of Na_2SO_4 . Investigating this apparent discrepancy, we found that the solubility of Na_2SO_4 is quite sensitive to temperature, viz. (g per 100 g of H_2O), 9.0 at 10 C, 19.5 at 20 C, 40.8 at 30 C, (N.A. Lange, Handbook of Chemistry, 9th edn., Handbook Publishers, Inc., Sandusky, OH, 1956, p. 1104). Consequently, at low temperature, the salt content

was insufficient to maintain structural integrity of the glands. Since temperature is crucial to solubility of Na_2SO_4 , we report this observation to alert researchers examining structural morphology of cottonseed pigment glands to also be aware of ambient temperatures.

Sincerely,
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