

LETTERS TO THE EDITOR

	PAGE		PAGE
Emission Spectrum of Lead Iodide— P. TIRUVENGANNA RAO	8	Sex Reversal (Heterogamy) in Jack-Fruit Tree (<i>Artocarpus integrifolia</i> , Linn.)— S. V. VENKATARAYAN	14
Glucose as a Beverage—F. GORDON CAWSTON	8	A Note on the Amphidiploid of the Hybrid of <i>Pennisetum typhoides</i> Stapf, and <i>Hubbard</i> × <i>P. purpureum</i> Schumach— N. KRISHNASWAMY AND V. S. RAMAN ..	15
The Determination of Linoleic Acid in Glycerides—A. R. S. KARTHA, K. N. MENON AND P. S. RAMAN	8	Angular Leaf-Spot of Kudzu in Mysore— M. J. THIRUMALACHAR	16
Cholera through Nira—J. V. BHAT AND RODA N. REPORTER	9	Production of Thymol from Ajowan Seeds —JAMES VERGHESE, K. C. GULATI AND M. L. JOSHI	17
The Growth Rings on the Otoliths of the Oil Sardine, <i>Sardinella longiceps</i> Cuv. and Val.—R. VELAPPAN NAIR	9	Wooden Pans for Sugarcane Seedlings R. R. PANJE	18
On the Occurrence of the 'Mrigal' <i>Cirrhina</i> <i>mrigala</i> (Hamilton) in the River Godavari—K. H. ALIKUNHI	11	Some Observations on Juices of Diseased Sugarcane—K. L. KHANNA AND A. S. CHACRAVARTI	19
A Mutant <i>Cedrus Deodara</i> , Loudon— T. N. KHOSHOO	12		
Smut on the Mat-Sedge, <i>Cyperus pangorei</i> , <i>Rottb.</i> —S. V. VENKATARAYAN	13		

EMISSION SPECTRUM OF LEAD
IODIDE

CONTINUING the work on thallium iodide, the emission spectrum of the iodide of lead, the element next to thallium in the periodic table, is obtained in a high frequency discharge. Characteristic bands attributed to the diatomic molecule PbI , are obtained in the region $\lambda 6400 - \lambda 4300$. The bands are generally degraded towards the red, though some of them chiefly on the more refrangible end of the spectrum are headless and diffuse. A vibrational analysis of the bands has led to the following approximate constants.

$$\nu_e = 19509.6 \quad \omega_e' = 119.5 \quad \omega_e'' = 156.6$$

$$\chi_e' \omega_e' = 0.25 \quad \chi_e'' \omega_e'' = 0.30$$

The vibrational constants are found to be in keeping with those of the related iodide molecules in the same horizontal row of the periodic table and of the other halides of lead. The intensity distribution in the system is analogous to that in the emission bands of $PbCl$.

A full discussion of the analysis is being communicated shortly to the *Indian Journal of Physics*.

Andhra University, P. TIRUVENGANNA RAO.
Waltair,
December 8, 1948.

GLUCOSE AS A BEVERAGE

IN wine-growing districts there is sometimes a severe shortage of good milk and cheese except where cows are kept privately, and

excessive cultivation of grapes may interfere with adequate grazing of cattle.

Refreshing beverages are widely favoured but there is reason to object to much of the preserved mineral waters which have only partially supplied the demand for fresh-fruit juices instead of what may be kept indefinitely.

There is a common demand for some sweet beverage which may be taken repeatedly and for long periods with impunity and this is available with solutions of *Glucose*.

Invalids and convalescents are often recommended to take *Glucose* as a readily absorbed remedy for wasting disease and it should be encouraged among communities affected by malnutrition as well as to prevent acidosis.

Glucose is readily excreted by the kidneys, is a useful stimulant for persons about to undergo an operation and serves as a useful substitute for other flavouring of plain water.

If this beverage were more accessible among the poorer classes and became popular among the wealthy it would do much to supply a natural craving after sugar without producing the undesirable effects of alcoholic beverages.

Durban, F. GORDON CAWSTON.
December 16, 1948.

THE DETERMINATION OF LINOLEIC
ACID IN GLYCERIDES

STAINSBY¹ has proposed a method for the determination of linoleic acid in edible fats consisting in the oxidation of the fat in