recorded markedly greater resistance than the other two, *viz.*, Co.'s 213 and 312.

The studies in progress have shown a definite inheritance of anatomical characters in sugarcane hybrids, and it would appear possible by a suitable choice of parents to introduce into new canes certain of the desired anatomical characters.

J. THULJARAM RAO.
T. S. VENKATRAMAN.

Imperial Sugarcane Station,
Coimbatore,
February 22, 1941.

THE CARDAMOM WEEVIL, *PRODIOCTES HAEMATICUS* CHEV. VAR IN SOUTH INDIA

IN some of the cardamom plantations in Travancore a new pest has appeared in *Prodioctes hæmaticus* Chev. var., which has been recently reported from Ceylon (Hutson, 1939) as a fairly serious pest in certain areas. The incidence of this pest in South India may have been very low till now and this may account for the absence of any record of this insect as a pest of cardamoms here.

The damage caused is during the grub stage when it tunnels into the rhizome and the basal portion of the pseudostem killing the attacked plant and gradually the associated ones also in the clump probably due to some pathogenic fungus either carried by the grub or getting access through the injured portion. The common shoot borer, *Dichocrocis punctiferalis*, is not responsible for the clump rot as only the attacked shoot is destroyed. A root boring caterpillar, (*Hilarographa* ?) is often met with but it does not bore into the rhizomes and its responsibility for the causation of the clump rot yet remains to be determined.

An account of the weevil pest in greater detail is being published elsewhere.

S. JONES.

Pampadampara Cardamom
Research Station, Trivandrum,
February 10, 1941.

[1] Hutson, J. C., *The Tropical Agriculturist*, 1939, **93**, 281.

A NOTE ON THE MINERAL WATER FROM SURANGUDI

SURANGUDI, a small village in Kulathur Zamindari in Tinnevelly District, is reputed to possess a well whose water is valued for its therapeutic qualities. At the instance of Sir P. S. Sivaswamy Iyer, K.C.S.I., who was interested in this mineral water, the geology of the area was studied. A chemical and a spectroscopic analysis of the water was also carried out.

The Zamindari lies within the coastal plain and is relatively featureless. This tract is gradually being elevated with respect to the sea, as evidenced by a shell bed 2 feet thick with recent species of *Arca* and *Cardita*, above the ground level at Surangudi. This rise must have taken place within historical times, as ancient edifices close to the coast are seen buried in sand dunes. Paving slabs of about a foot square, old pottery and coins of Raja Raja (985 A.D. to 1014 A.D.) are occasionally met with in fields.

The village stands on a hard massive dark-brown ferruginous lateritised gneiss. The rock is medium granular and shows patches of ilmenite. The soil of the area consists of red earth and black cotton clay. Sections of the rock show angular to subangular quartz grains, cemented together in a ferruginous matrix. Felspar, magnetite, ilmenite and epidote are noted.

The well is believed to be in existence from the time of King Varaguna Pandian (about 860 A.D.) and gives an yield of only 9 gallons an hour. The water is chalybeate, soft, colourless; shows a faint turbidity in transmitted light, and slight opalescence in reflected light. On exposure to air it sets free a reddish flocculent precipitate of hydrated iron-oxide.

Chemical Analysis:—Five litres of filtered water were used for the determination of total solids.

	Parts per 100,000
Total Solids	28·6
Chlorides as chlorine	0·7
(equivalent to NaCl)	1·1
Silica	16·4
$Fe_2O_3 — Al_2O_3$	1·5
Lime as CaO	0·5
Magnesium as MgO	0·06
Ba, Mn, F_2, Li, P_2O_5, and B	*nil*