from Indian waters and, therefore, this may be taken to be the first record.

The genus *Parioglossus* is represented in the world by three species, *P. tæniatus* Regan[1] from Seychelle Islands, the Australian *P. rainfordi* McCulloch[3] from Queensland, and *P. borneensis* Koumans[2] from Balikpapan Bay, Borneo (Personal communication from Dr. A. C Wheeler).

The general colouration of *P. tæniatus* from Ratnagiri is greenish-yellow, with a fairly thick dark longitudinal band on the side, extending from the post-opercular region to the caudal peduncle, where it ends in a black, roughly triangular patch edged with green lustre on its upper margin, nearly one-third in the caudal fin. Along this mid-lateral band in the upper margin of the belly region, there is a diffused streak of orange-yellow with a green sheen between the two. Slightly posterior to the pectorals, three rounded patches of brilliant violet-blue are arranged in a line, extending up to the fourth fin-ray of the first dorsal. Minute melanophores are arranged in a longitudinal pattern along the mid-dorsal line extending from the level of the eyes up to the peduncle. All the fins are almost transparent. There is an oblique iridescent band from the middle of the post-opercular bone, below the lower margin of the eye, to nearly the gape of the mouth. There are two such coloured patches but smaller in size, one on the lower margin of the post-opercle and the other on the peduncle of the pectoral fin.

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INCIDENCE OF MARINE WOOD-BORING MOLLUSCS ON THE SOUTH-EAST COAST OF INDIA

THE shipworms of the family Teredinidæ are widely distributed along the coasts of India.[1-4] These pests are economically very important since they attack and destroy a variety of wood materials in the sea and brackish waters ranging from living mangroves[5] to even the floating seeds.[1] While the shipworms of Bombay,[6] Madras[1, 2] and Visakhapatnam[4] have been studied in considerable detail our information regarding the occurrence and distribution of these pests along the extensive coasts of India is incomplete. This is particularly so with regard to the south-east coast and near about the Krusadai Island, a locality visited by a large number of zoologists every year. The fauna of Krusadai[7] does not include any shipworm. A collection of wood-boring molluscs made on the last week of December 1961 from Pamban on the Rameswaram Island revealed the presence of at least nine species of shipworms and one wood-boring Pholad, *Martesia striata*. These borers were recovered from drift wood (*Cedrela toona*, *Tectona grandis*, *Thespesia* ?, *Pandanus* sp.) that were cast ashore and in many cases only the shells and pallets were present the body having undergone degeneration. It is not clear whether these are permanent residents of this area or whether they are driven by the monsoon winds and cast ashore from neighbouring areas through the agency of the drift wood. The forms collected were *Bankia* (*Bankia*) *bipalmulata* (Lamarck), *Bankia* (*Bankiella*) *nordi* Moll, *Bankia* (*Bankiella*) *indica* Nair, *Bankia* (*Plumulella*) *lineata* Nair, *Teredo* (*Teredo*) *madrasensis* Nair, *Teredo* (*Nototeredo*) *nambudalaensis* Nair & Gurumani, *Teredo* (*Teredothyra*) *indomalaica* Roch, *Teredo* (*Lyrodus*) *malaccana* Roch and *Teredo* (*Dactyloteredo*) *diederichseni* Roch.* The occurrence of these shipworms in Pamban extends the distribution of 8 species previously recorded either from other parts of Madras coast[1, 3, 5] or Visakhapatnam[4] to this area as well. For *Bankia* (*Bankiella*) *nordi* and *Teredo* (*Teredothyra*) *indomalaica* these are first records from India even though they have previously been reported from Indonesia and Singapore.[9] It is noteworthy that some of these shipworms show an extensive distribution in the Indian Ocean. Three species of the subgenus *Lyrodus* are known to occur in the Indian Ocean namely *Teredo* (*Lyrodus*) *affinis* Deshayes (Madagascar, East Africa), *Teredo* (*Lyrodus*) *malaccana* Roch (Malaya, Indonesia, Vizag) and *Teredo* (*Lyrodus*) *milleri* Dall, Bartsch & Rehder (Hawaii, Vizag). The occurrence of *Teredo* (*Lyrodus*) *malaccana* shows that this species too has an extensive distribution along the east coast of India. *Bankia* (*Bankia*) *bipalmulata* also shows a wide distribution having previously been recorded from Indonesia, Philippines, Hawaii, New Caledonia, New Hebrides, Pondicherry and Madras.[9] *Bankia* (*Plumulella*) *lineata* Nair[3] was first recorded from Madras and later reported as occurring from Vizag also.

It will certainly be worthwhile if an extensive survey is made of the underwater wooden structures along the south-east coast of India for a better understanding of the species which are well established forms in this area. This is an essential prerequisite for taking measures towards their control. A detailed report will be published elsewhere.

University of Madras, Extension, Madurai, *February* 14, 1962.

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* Syn. *Teredo* (*Teredora*) *gregorei* Dall. Bartsch & Rehder (personal communication, Felix Roch).

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CONTROL OF THE LISSORA FRUIT WEEVIL, *BARIS CORDIAE* MARSHALL (INSECTA: CURCULIONIDAE) IN RAJASTHAN

IN continuation of the work on the control of *Baris cordiæ* Marshall, reported by one of us (Kushwaha,[1-3]) further trials in respect of the control of this weevil were undertaken in 1960, using Endrin (EC., 0·025%), DDT (WP., 0·25%), BHC (WP., 0·25%) and Folidol (EC., 0·025%). Of these, only Endrin had given promising results that year. Consequently the control experiments during 1961 were restricted to Endrin only out of the above, but Ryania was also included as it had been reported effective against certain borers.[4-6] The present note gives an account of the recent trials conducted at different localities in Udaipur to work out an economic dose of Endrin in the control of this borer.

Endrin (20% EC.) was used as a spray in three concentrations, *viz.*, 0·025%, 0·05% and 0·1%, while Ryania (90% WP.) was used as 1% spray. Applications were made as bloom sprays on three different dates—the first one during the last week of March and the second and the third during the first week of April. In all cases approximately only half of a tree was sprayed, the other half being left untreated to serve as control. 200 fruits were collected at random 4 weeks after application in the case of each treatment for examination and the percentage of infestation recorded in fruit counts (*vide* Table 1).

TABLE I

Treatments	Percentage of infestation in fruit counts taken 4 weeks later			
	Trials made on 3 different dates in March–April			Mean results of the three trials
	I	II	III	
Endrin (0·025%) ..	2·5	..	..	0·83
Control ..	45	88·5	16·5	50
Endrin (0·05%) ..	..	..	1	0·3
Control ..	45·5	48·5	9	34·3
Endrin (0·1%) ..	2·5	2	..	1·5
Control ..	36·5	2	100	46·2
Ryania (0·1%) ..	0·5	52·5	94	49
Control ..	25	98·5	100	74·5

Means of results; Treatments: Control* — 51·24; Ryania—49; Endrin (0·1%)—1·5; Endrin (0·25%)—0·83; Endrin (0·05%)—0·3.

(* Average of the means of the results of the controls of the three sets of Experiments.)

C.D. at 5% level of significance between control and treatments — 8·229.

Statistically, therefore, all doses of Endrin have given significant results over control, while in the case of Ryania the results have been insignificant.

Further, C.D. calculated at 5% level of significance between the different treatments works out at 10·28.

As such, the Endrin has provided significantly better control over Ryania, but the three different doses of Endrin are insignificant amongst themselves. It may be mentioned here that some fruits had shown tainting effect at the base of the fruit stalk in one of the treatments with 0·1% Endrin spray.

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