R SHARP. District.

SUBJECT: INSECT DAMAGE TO SANDALWOOD TREES.

Head Office Reference 789/30 Local Office Reference 31/30

Referring to your memorandum of the 30th July, I have received the following information from the Government Entomologist :-

"The galls were placed under incubation and have proved to be due to the attack of a small gall-forming chalcid wasp.

This parasite has no connection whatever with the insect previously submitted on the sandalwood.

The grubs feeding upon the foliage are , as previously stated, the larvae of one of our native Chrysomelid beetles.

To determine which species it is, it will be necessary for Forester Sharp to keep a look out for the adult beetles and forward same for identification."

A.W. Kessell

CONSERVATOR OF FORESTS

PERTH.
12/9/1930.

Noted 11/9/30.

KALGOORLIE

30/7/1930

CONSERVATOR OF FORESTS

PERTH.

Insect Damage To Sandalwood Trees.

789/30. 31/30.

Further to my report of the 26th ult re above, I have to advise that the damage mentioned is very widespread , insect attack being noticed on almost every tree between Scahill and Zanthus on the Trans line, some only slightly others being practically leafless .

It is noticed that on most trees small lumps or galls have been formed on the twigs and branchlets, some of which contain small grubs which possibly are the larvae of the parisites.

I am forwarding a quantity of twigs etc from which Mr Newman may be able to determine whether the galls have any connection with the parasites or pest.

KALGOORLIE

30/7/1930.

FORESTER.

SLK/AW

FORESTS DEPARTMENT, WESTERN AUSTRALIA. Form F.D. 79

THE OFFICER IN CHARGE, KALGOORLIE.

For attention FORESTER SHARP. ~~Divisional~~ District } Forest Office.

SUBJECT: ..... District.

Head Office Reference 789/30

Local Office Reference .....

Herewith copy of report from the Economic Entomologist concerning the small grubs attacking sandalwood trees, dealt with in your report 31/30, dated the 26th ultimo.

It would appear that no action is possible, and that, as suggested by Mr. Newman in his concluding paragraph, we must hope that the outbreak will be controlled (before any excessive damage is done) by the natural enemies of the beetle concerned.

PERTH.
10/11/1930.

CONSERVATOR OF FORESTS.

(COPY)

DEPARTMENT OF AGRICULTURE,
PERTH.
3rd July, 1930.

The Conservator of Forests,
PERTH.

Your letter to hand, also report and specimens from Forester Sharp, Kalgoorlie.

The larvae submitted are the progeny of one of our native Chrysomelid beetles. It is not possible to determine which species it is, unless we can get adult specimens. The larvae I have incubated and feed with locally grown Sandalwood hoping that I may rear them to the adult stage.

These beetles are normally controlled by natural enemies, but some years they appear in plague form owing to the failure of the parasites. This, judging from the report of Forester Sharp, appears to be a plague form year.

All the beetles belonging to this group are plant feeders. They are closely related to the Cerambycidae (Longicorns) but are not borers. The adults are small oval rounded beetles, rarely measuring over ½" in length. Their prevailing colours are red, yellow, black or brown, marked with metallic tints and capable of flight. The eggs are laid upon the foliage or twigs of the food plants, upon which the larvae feed, when they emerge. When full grown, they crawl down to the soil and pupate.

Probably the most numerous of this family that we have, are those known as the Paropsidae. These beetles are very much like the Coccinellidae (Ladybirds). There are two generations per annum.

Treatment. Being apparently wide-spread, there is presented great difficulty in applying any measure of control. If we had the means of applying a poison dust, as is done in some parts of the world, per medium of aeroplanes, there might be some hope of combating this pest by artificial means. Being foliage feeders, the application of Arsenate of Lead per medium of a spray pump would be effective.

Powdered Arsenate of Lead applied by a dust gun would also destroy them.

Formula. 2½ lbs. of Paste Arsenate of Lead to 40 gallons of water. For dusting, equal parts of powdered Arsenate of Lead and Lime.

I fear that under the present circumstances, we must hope that the outbreak will be eventually controlled by natural enemies.

(Sgd.) L. J. NEWMAN,

ECONOMIC ENTOMOLOGIST.

KALGOORLIE

CONSERVATOR OF FORESTS 26/6/1930.

PERTH.

Insect Damage to Sandalwood Trees.

31/30.

I have to report that practically all of the sandalwood trees between Karramindie and Scahill are suffering from the attack s of myriads of small grubs,which eatoff all of the new shoots and leaves as soon as they appear and then attack the old leaves, at Scahill where the pest is worst some trees are already dead and many others appear too badly eaten to recover, even some of this years seedlings are badly attacked.

It appears that the sandalwood trees in the locality mentioned have suffered from the attacks of this pest for some years , as few trees look healthy, the majority having a lot of dry twigs and branch -es and leaves look tough and show spots which have been punctures and which have healed up,

No doubt the pest is more prevalent in certain seasons, and as it only attacks sandalwood and quondong trees it would appear that with trees of this species diminishing annually it will only be a short time before the pest will kill all sandalwood trees and gradually spread further afield, there is evidence of a few trees being slightly affected at Lakeside reserve , observations will be taken in various districts as opportunity offers and results forwarded to you in due course, under separate cover I am forwarding a parcel containing the following material

(I) bottle containing grubs.

(2) leaves and twigs of mature trees showing attack by grubs (I930) seedling showing damage by grubs.

KALGOORLIE
26/6/I930.

FORESTER.