



Updates on Asian Subterranean Termites in Fiji

Asian Subterranean Termite (AST) (*Coptotermes gestroi*) originated from South East Asia and is also an important structural pest reported from Pacific islands, North America, Caribbean islands, South America, and Indian Ocean islands. According to Fijian Forestry Department, Fiji has thirteen species of termites namely: *Cryptotermes brevis*, *Cryptotermes domesticus*, *Glyptotermes taveuniensis*, *Incisitermes repandus*, *Procryptotermes sp.*, *Neotermes gnathoferrum*, *Neotermes papua*, *Neotermes samoanus*, *Coptotermes acinaciformis*, *Prorhinotermes inopinatus*, *Nasutitermes sp.*, *Glyptotermes brevicornis* and *Nasutitermes olidus*. In 2010, a Queensland forestry entomologist (consulting to the Fijian Government) confirmed the identity of the invasive species causing the massive damage to wooden structures (households) and crops in Lautoka as *C. gestroi*.

AST poses a potentially significant social, economic and biosecurity risk in Fiji. It was first discovered and reported to Biosecurity Authority of Fiji (BAF) in Fiji in late 2009 at Lautoka and then later discovered in Labasa after Fiji wide awareness. It is assumed at this stage that the AST might have entered Fiji with infested wooden packaging materials (crates and pellets) from Asian countries. The extent of current damages to infrastructure strongly suggests that AST was introduced to Fiji about 20 to 30 years ago and slowly has built up its numbers over these years to a visibly destructive stage now. Based on the government's efforts through BAF to contain and eradicate AST, the Fiji Government has gazette the extension of the Biosecurity Emergency areas for AST, 2015 - (Appendix 1 (i), (ii) & (iii)).

Perhaps some of the most destructive social insects worldwide are the termites. Termites are social insects in the *Isoptera* group, an order which contains roughly 3,000 described species worldwide and causes significant damage amounting to huge financial and production losses. These damages include structural timbers, wooden goods (furniture and fittings), paper (books and documents), cotton cloth, cotton garments, certain plastics, trees (living and dead) and many crops (sugarcane, pine, mango, cassava and coconut trees) throughout the world. Termite control and management is estimated to be the largest segment in the global pest control industry and the economic damage caused by termites, amounts to billions of dollars annually in the United States of America, Australia and Japan, but to date this has never been accurately quantified in developing countries like Fiji. The Fijian Government has tasked BAF to monitor, control and manage this invasive alien species and possibly work towards its suppression leading to very low prevalence in the environment and eradication, if feasible.

AST is a recent introduction in Fiji, being a new species of termite and is currently only confined to certain areas of Lautoka and Labasa only. BAF will continue to work towards containing AST within Lautoka and Labasa to a manageable –level through the effective and efficient utilization of government funds.

Currently BAF has strategically place restriction of movement of infested host material from the infested zone to the non-infested zone as BAF's commitment in the management of risks and impacts of AST within the infested zones in Fiji. The declaration for biosecurity emergency

areas for AST is as follows: ““Movement of all stages of the Asian Subterranean Termites (*C. gestroi*) including eggs, or of any material hosting *C. gestroi*, into or out of the declared biosecurity emergency areas shall be strictly prohibited. Host materials include *C. gestroi* nests, soil, potted plants, wood, logs, timber, lumber, kindling, planks, wooden building materials, wooden furniture, live plants, harvested host plants (pine, mango, cassava, coconut tree and sugarcane), and articles made of cellulose (books, papers, clothing, textiles).”

Many major awareness programs have been conducted through all available media avenues to the Fiji general public on the do’s and don’ts in regards to AST. The control, management, monitoring, treatment and some rehabilitation in the past is a fully funded grant to the affected households and is technically available through BAF services under a special project.

The way forward is to consolidate all the collaborations effort of all line agencies in making a concerted effort against AST. Assistance from external parties on the early detection of AST and rapid control measures to arrest its establishment and spread needs to be employed. An integrated management approach is long term answer to AST problems coupled with improved genetic material (resistance varieties) and employing the recommended package of practices. BAF believes with proper injection of technical expertise, funding and ongoing collaboration both with external and internal parties, Fiji will be successful in the on the containment and eradication of AST this biosecurity invasive pest of concern.

Current Status of AST infested Homes/ Dwellings in Fiji	
Number of Houses/ Dwellings treated from 2011 to 2013	1,991
Number of Houses/ Dwellings treated for 2014	1,612
Number of Houses/ Dwellings treated for 2015 (Till March) 1st Quarter	487
Total Houses Treated to date	4,090

**Fiji Government Gazette on the extension of the
Biosecurity Emergency areas for AST (*Coptotermes gestroi*), 2015.**

BIOSECURITY PROMULGATION 2008
(PROMULGATION NO. 28 OF 2008)

DECLARATION OF BIOSECURITY EMERGENCY AREAS FOR ASIAN
SUBTERRANEAN TERMITES
(*Coptotermes gestroi*)

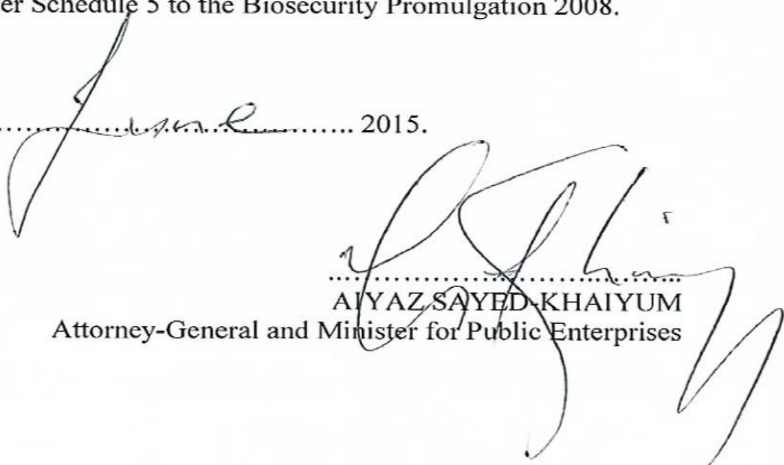
IN exercise of the powers conferred upon me by section 77(1) of the Biosecurity Promulgation 2008, with the advice of the Biosecurity Authority of Fiji and in consultation with the National Management Disaster Council, I hereby declare the areas of Lautoka District in Ba Province and Labasa District in Macuata Province as identified in the Schedules to this Declaration, to be biosecurity emergency areas to limit the spread of Asian Subterranean Termites (*Coptotermes gestroi*).

This Declaration shall be in force for a period of six months from the date of its publication in the *Gazette*.

Movement of all stages of the Asian Subterranean Termites (*Coptotermes gestroi*) including eggs, or of any material hosting *Coptotermes gestroi*, into or out of the declared biosecurity emergency areas shall be strictly prohibited. Host material include *Coptotermes gestroi* nests, soil, potted plants, wood, logs, timber, lumber, kindling, planks, wooden building materials, wooden furniture, live plants, harvested host plants (pine, mango, cassava, coconut tree and sugarcane), and articles made of cellulose (books, papers, clothing, textiles).

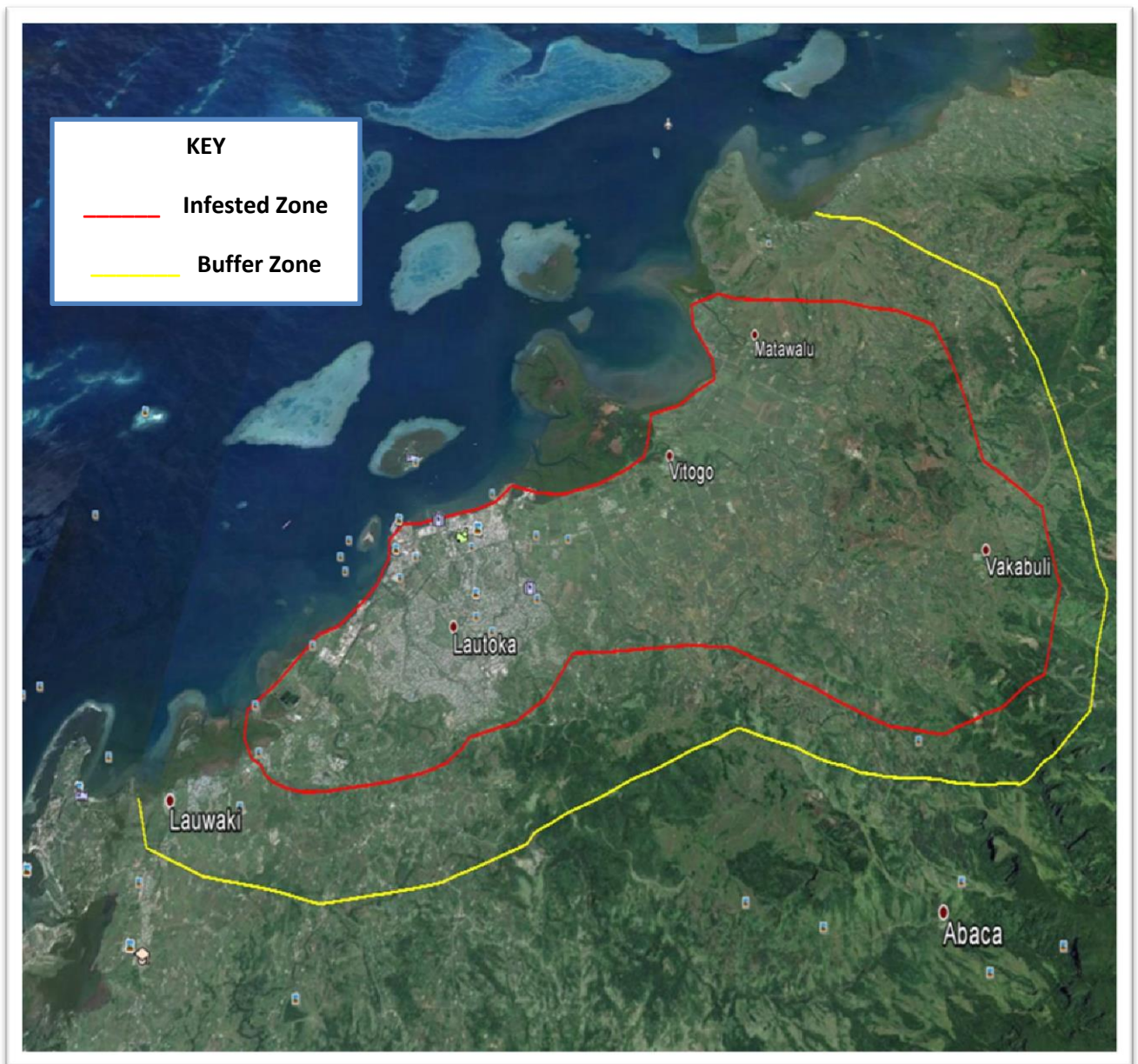
Pursuant to sections 79(3), 94(2) and 94(3) of the Biosecurity Promulgations 2008, any person who contravenes any direction made pursuant to this Declaration, commits an offence and shall be liable to the penalties prescribed under Schedule 5 to the Biosecurity Promulgation 2008.

Dated this 11th day of June 2015.


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AYAZ SAYED KHAIYUM
Attorney-General and Minister for Public Enterprises

Appendix 1 (ii)

MAP OF LAUTOKA DISTRICT – Current AST (*Coptotermes gestroi*) infested areas.



MAP OF LABASA DISTRICT - Current AST (*Coptotermes gestroi*) infested areas

