

## **Effects of phytosanitary measures to reduce borer infestations of wood packaging materials and trends in interception rates of organisms associated with wooden items**

Ecki Brockerhoff <sup>\*1</sup>, Robert Haack <sup>2</sup>, Joe Cavey <sup>3</sup>, Andrew Liebhold <sup>2</sup>, Frank Lowenstein <sup>4</sup>, Mark Kimberley <sup>1</sup>, John Bain <sup>1</sup>, Stephanie Sopow <sup>1</sup>, Alan Flynn <sup>5</sup>, Lalith Kumarasinghe <sup>5</sup>

<sup>1</sup> Scion / NZ Forest Research Institute

<sup>2</sup> US Forest Service

<sup>3</sup> USDA APHIS

<sup>4</sup> The US Nature Conservancy

<sup>5</sup> MAF Investigation & Diagnostic Centres

Concerns about the impacts of invasive bark beetles and wood borers have prompted the development of phytosanitary regulations designed to reduce infestations of wood packaging materials (WPM) traded internationally. The International Standards for Phytosanitary Measures, No. 15, Guidelines for Regulating Wood Packaging Material in International Trade (hereafter "ISPM 15"), requires the use of heat treatment or fumigation, to certain specifications, to achieve compliance of WPM used in international trade. ISPM 15 was first implemented in NZ in 2003 and in the United States between 2005 and 2006. While the treatments described above are known to be effective, reports of occasional interceptions of live borers in various countries indicate that measures to manage pathway risks are not (yet) completely effective. As part of a wider project to assess the benefits and costs of phytosanitary measures, we examined interception rates recorded in the United States and other countries, before and after the implementation of ISPM 15, to investigate the effectiveness of the policy. We queried the USDA AQIM data base which is designed to provide more accurate information on actual interception rates than regular, less systematically collected interception data. The analysis indicated that interception rates declined after the introduction of ISPM 15 but a persistence of some WPM infestations was noted. A review of recent interceptions of borers and other organisms of concern that were detected on WPM and other wooden imports will also be given.

