CONCERNS OF COSAVE COUNTRIES REGARDING INTERCEPTIONS OF LIVE INSECTS IN WOOD PACKAGING MATERIAL

1. INTRODUCTION

Preventing the introduction of exotic pests remains a challenge, despite wide-scale adoption of ISPM 15 across the globe, because of movement of poorly treated or noncompliant ISPM 15 wood packaging.

The ISPM 15 mark must be applied to wood packaging material to certify that it has been subjected to a treatment approved under ISPM 15. Information on pest risks associated with ISPM 15-compliant wood packaging is scarce and despite being ISPM 15-compliant, a proportion of WPM may pose significant pest risk and may provide a pathway for the introduction of exotic timber pests.

2. INTERCEPTIONS OF LIVE INSECTS IN WOOD PACKAGING MATERIAL IN THE COSAVE REGION (2008-2022)

There are many scientific works in the international literature that point out the importance of wood packaging material as the main pathway for the introduction of organisms (mainly insects) that attack trees or their wood products, whether in standing trees, in decay trees or in processed wood (sawn wood). The results of the inspections carried out in COSAVE countries demonstrate this. This is how in Chile, several pests have entered through infested wood packaging material, among them *Sirex noctilio*, *Tremex fuscicornis* (Hym.: Siricidae) and *Hylotrupes bajulus* (Col.: Cerambycidae), in recent years.

In most COSAVE countries, inspections of wood packaging material at import are carried out at border controls, at the place of destinations or both, with 2,192 records of live insect interceptions.

Considering the interceptions of live insects, it was found that 68.8% of them occurred in wood packaging material that had the regulatory mark of ISPM 15, which meant that a phytosanitary treatment had been carried out in the country of origin of the wood packaging material.

Twenty four (24) species of absent quarantine pests were intercepted, belonging to four families of the order Coleoptera, 55.7% correspond to the Bostrichidae family, with a total of 8 species and 49 interceptions, followed by Cerambycidae with 31 interceptions (35.2%) and 12 species and in third place are the species (3) of the Curculionidae family with 8% of the interceptions (Table 1).

Table 1: Frequency of interceptions of absent quarantine pests (live) for COSAVE countries (2008 – 2022).

Family	Species	Total
Bostrichidae	*Heterobostrychus aequalis*	13
	Lyctus sinensis	1
	Sinoxylon anale	19
	Sinoxylon conigerum	12
	Sinoxylonun identatum	1
	Sinoxylon sudanicum	1
	Sinoxylons exdentatum	1
	Xylobiops basilaris	1

Buprestidae	*Agrilus sp.*	1
Cerambycidae	*Anoplophora glabripennis*	1
	Arhopalus rusticus	1
	Hylotrupes bajulus	1
	Monochamus alternatus	11
	Monochamus sartor	1
	Monochamus sutor	2
	Monochamu ssp.	6
	Monochamus scutellatus	1
	Monochamus rubigineus	1
	Monochamus galloprovincialis	4
	Trichoferus campestris	1
	Tetropium fuscum	1
Curculionidae	*Ips sp.*	2
	Ips typographus	3
	Xyleborus ferrugineus	2
	Total	**88**

The most frequently intercepted species are *Sinoxylon anale*, *Heterobostrychus aequalis* and *Sinoxylon conigerum*.

The genus Monochamus has been intercepted on 26 occasions, comprising 7 species, among which are vector species of the pine nematode (*Bursaphelenchus xylophilus*). It is worth mentioning that this nematode is considered one of the most important pests of pines, as it causes the death of the attacked trees in a short period of time.

In relation to the countries of origin of interceptions of absent quarantine pests, Asian countries lead the ranking, being the countries with the highest frequency of interceptions, followed in importance by European countries and lastly by countries in America.

3. FINAL COMMENTS

1. Interceptions of live insects in wood packaging material continue to be carried out to date. 68.8% of the interceptions have been made in wood packaging material with the presence of the regulatory mark, with Asian countries being the main origins of these interceptions.

2. Notifications of non-compliance have been made due to the presence of live insects in imported wood packaging material.

3. Regarding absent quarantine pests, the genus *Sinoxylon* is the one generating the greatest pressure for entry, especially *S. anale* and *S. conigerum.*

4. Additionally, the number of interceptions of the *Monochamus* genus is highlighted, due to its importance as a vector of the pine nematode (*Bursaphelenchus xylophilus*). As well as the interceptions of *Ips* species, because they affect the phloem of coniferous tree species.