Introduced and invasive tree species in European forests



Lucie Vítková and Frank Krumm

With support from



Federal Ministry of Food and Agriculture European Forest Institute - Central European Office EFICENT Wonnhaldestr. 4, 79100 Freiburg, Germany

> Tel.: +49 (0) 761 4018 142 Email: <u>lucie.vitkova@efi.int</u>



by decision of the German Bundestag

Definitions

- Evolution of definitions
 - Over time
 - Different languages
 - Controversial topic

Lack of precision









Introduction

A process (or an action) that enables a species (or its propagule) to overcome, through a human agency, a major geographical barrier. *Amended from Richardson et al. (2000)*

Introduced species

(alien, exotic, non-native, non-indigenous)

A species in a given area whose presence there is due to intentional or accidental introduction as a result of human activity.

Gassmann and Weber (2006)

Key definitions



<u>Invasion</u>

A process whereby a species must overcome a series of barriers to be able to spread into novel areas in which it becomes dominant. *Amended from Valéry et al. (2008)*

Invasive species

A (non-native) species that has been naturally reproducing in large numbers over considerable distances causing negative impact on local ecosystems; i.e. by direct competition for natural resources.

Key definitions



Naturalisation

Process whereby the species establishes new self-perpetuating populations, undergoes widespread dispersal and becomes incorporated within the resident flora.

Richardson et al. (2000)

Native species

Species that have evolved in a given area or that arrived there by natural means without the intentional or accidental intervention of humans from an area where they are (or had been) native.

Pyšek et al. (2004)

Key definitions



Invasiveness

The features of an organism (life history traits and modes of reproduction) that define their capacity to overcome various barriers to invasion.

Amended from Richardson et al. (2000)

Invasibility

The properties of a community, habitat or ecosystem that determine its inherent vulnerability to invasion.

Lonsdale (1999)

With support from







by decision of the German Bundestag