Survey amongst physicians in Luxembourg on burns caused in 2011 and 2012 by the giant hogweed (*Heracleum mantegazzianum* SOMMIER & LEVIER, Apiaceae).

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The giant hogweed [Fig. 6] (De.: Riesen-Bärenklau; Fr.: Berce du Caucase) is an invasive alien plant species native to the Caucasus and introduced in Luxembourg in 1935. The sap of the giant hogweed causes phytophotodermatitis in humans, resulting in blisters [Fig. 7], long-lasting scars, and - if it comes in contact with eyes – it can cause blindness.

This study covers the period between January 2011 and August 2012 and has been conducted at the Ecology department of the Luxembourg National Museum of Natural History.

The survey has been launched on August 30th 2012 by a mail sent to 415 physicians in Luxembourg (36 dermatologists and 379 general practitioners). The deadline for replies was September 25th 2012. 90 physicians answered the survey questionnaire (12 dermatologists and 78 general practitioners).

The main goals were to:

(1) assess the impact of the giant hogweed on human health;

(2) identify the population age groups which are most affected;

(3) get the professional opinion from a wide range of physicians.

Results show that there have been at least 60 (max. 161) cases of burns in the study period [Fig. 5], while a previous mail contact with physicians back in 2008 resulted in no feedback on burn cases. These features are in line with the ongoing spreading of the species in Luxembourg. Most victims were aged between 18 and 60 [Fig. 3] and have been affected by burns in summer [Fig. 4]. The severity of burns ranged from not severe to medium [Fig. 2].

There appears to be a substantial agreement between the geographical distribution of the physicians practices in which burn cases were diagnosed, and the currently known distribution of the giant hogweed combined with the density of the Luxembourg population [Fig. 1].

The most frequent comment from doctors was the need for more sensitization work targeting the Luxembourg population [Table 1].

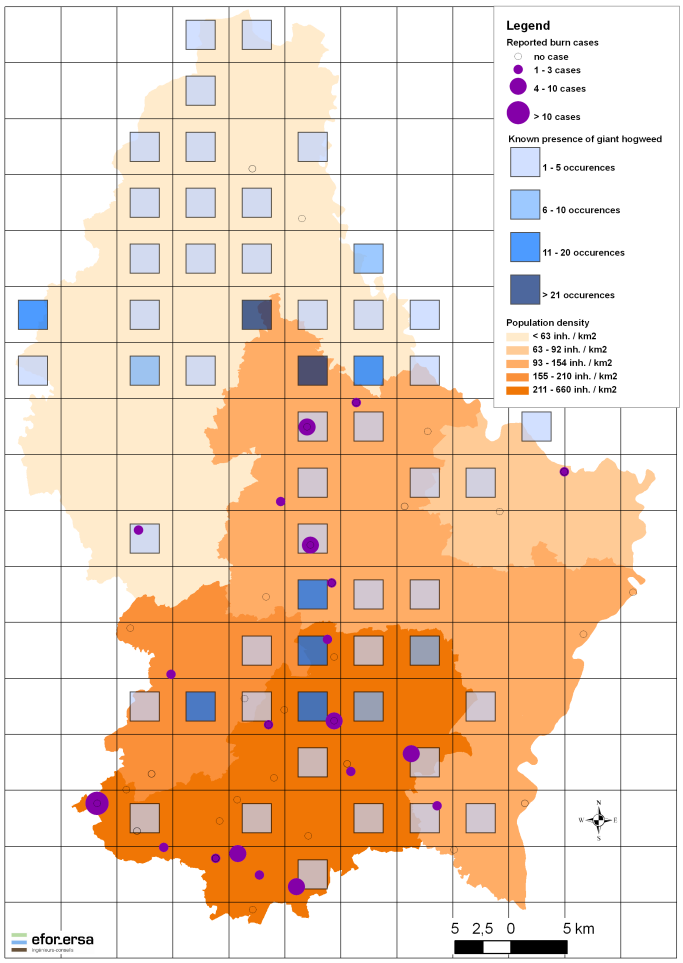

Fig. 1. Physician practices with burn cases in Luxembourg. Background : distribution of the giant hogweed and density of resident population.

Fig. 2. Severity of burns.

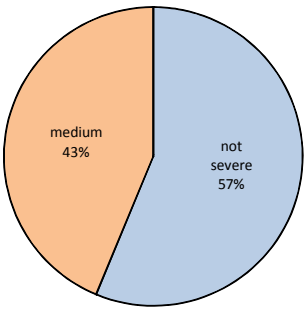

Fig. 3. Age groups of burn victims.

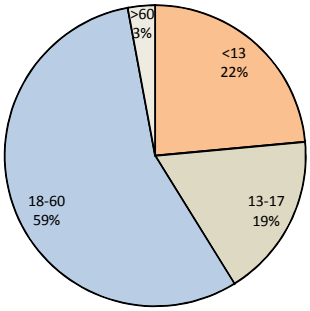

Fig. 4. Main season of burns.

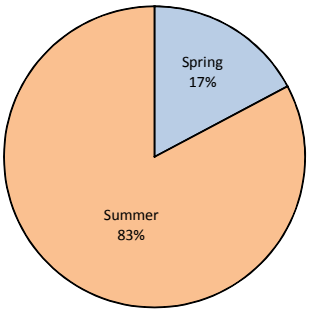

Fig. 5. Reports on burns from Jan. 2011 to Aug. 2012.

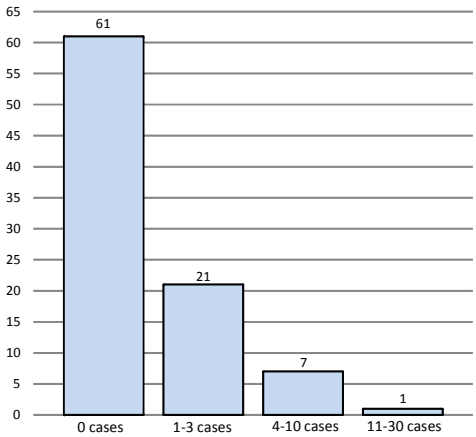

Table 1. Comments by physicians.

Difficulty of diagnosis	1
Higher risks near rivers	1
Higher risks in gardening	1
Risks posed by other plants	2
Minor local problem	2
Danger is often underestimated	3
Problem rising in the future	3
More sensitization work needed	9

Fig. 6. Giant hogweed. Photo by Fritz Geller-Grimm, http://commons.wikimedia.org.

Fig. 7. Burn spot on leg, Luxembourg, Sept. 2009.

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