

ARE PESTICIDES STILL BEING USED IN BELGIAN MUNICIPALITIES?

PAN EUROPE QUESTIONNAIRE ON THE USE OF PESTICIDES
IN BELGIAN MUNICIPALITIES (2015-2016)

ANALYSIS OF RESULTS



Pesticide
Action
Network
Europe



OCTOBER
2016

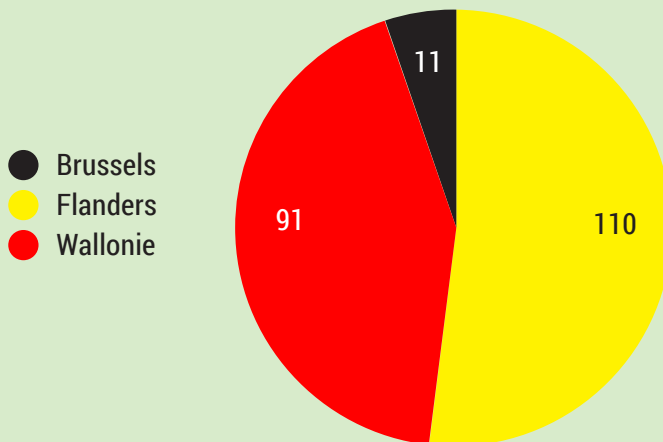
INTRODUCTION

The aim of this report is to provide an overview, illustrated by graphs and tables, of the current situation in Belgian municipalities regarding the extent of pesticide use as part of local land management activities.

In order to compile this overview, in 2015 we sent out a questionnaire containing 13 questions to every municipal council in Belgium to collect data on a range of topics.

So far, 212 completed questionnaires¹ have been received out of a total 589 Belgian municipalities, i.e. a response rate of 36%. We deemed this to be an adequate and relevant share of the potential responses to allow us to produce an initial report and identify the practices being applied. This study is therefore far from complete, and will be fleshed out as we continue to receive responses. As such, we invite any municipal councils who have not yet responded to our questionnaire to do so. We would also like to thank all those who have already responded, without whom it would not have been possible to produce this initial report. Finally, we would like to ask you to continue to update us on any new activities occurring in your cities with regard to the use of alternative methods.

Breakdown of the 212 responses received from the three regions



1) The questionnaire can be viewed on our website: <http://www.pesticide-free-towns.info/statistics-questionnaire>

LEGISLATION

European Directive 2009/128/EC² established a Europe-wide framework for an approach to pesticide use which goes hand in hand with the concept of sustainable development. It would take a great deal of time and effort to explain the details of how this directive is being applied in each of the Belgian regions. Instead, we would like to remind you of some of the key dates in the plan for the reduction of pesticide use in public areas, to shed more light on the results of the questionnaire.

21/12/2001

Introduction of a plan to reduce the use of certain pesticides in **Flanders** and change the ways in which others are used. Decision to ban pesticides from 01/01/2015 except for certain exemptions, particularly in the case of invasive species.

20/06/2013

Introduction of a pesticide ban in **Brussels** with allowance for a transition period up until 31/12/2018. After this date, certain exemptions will still apply including for invasive species, dock and thistles, and harmful pests.

01/06/2014

Introduction of a pesticide ban in **Wallonia** with allowance for a transition period up until 31/05/2019. After this date, certain exemptions will still apply including for exotic species, dock and thistles etc.

²) <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0128&from=EN>

ANALYSIS AND INTERPRETATION OF THE QUESTIONS

The following pages contain a step-by-step analysis of each of the questions sent to the Belgian municipalities, with descriptions of the results obtained and an explanation of certain key points.

Multiple responses were available for some of the questions in the questionnaire, whereas for others a single response was required. The possible answers are listed for each question. Furthermore, all the graphs follow the same structure. The horizontal axis indicates the number of towns (in the form of a percentage) for each response. The vertical axis indicates the responses, each annotated with a letter, which is explained below each graph.

12 QUESTIONS

1 Does your city/municipality use pesticides in the green areas it is responsible for maintaining? p.5

2 Why did you decide to reduce/eliminate pesticide use? p.6

3 How have you been able to avoid using pesticides to kill weeds? p.7

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5 How do you combat insects/harmful species without the use of pesticides? p.10

6 What alternative methods are used to combat insects such as wasps? p.11

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1 Does your city/municipality use pesticides in the green areas it is responsible for maintaining? (single response possible)

Table 1 % of municipalities which currently use/do not use pesticides

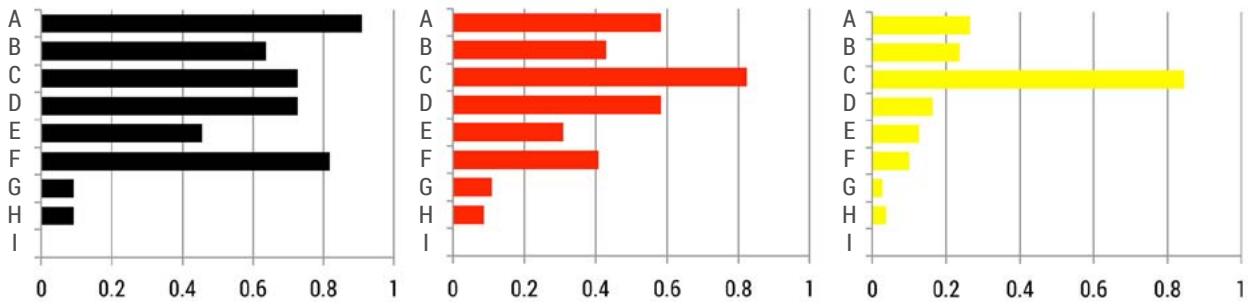
	Brussels	Flanders	Wallonie
No	64	77	52
Yes	36	33	48

At first glance, and to our delight, it appears that most municipalities in all three regions are not currently using chemical products on their land. Flanders has the highest score (77%) followed by Brussels (64%) and Wallonia. This is very likely due to the pesticide ban (with exceptions) which has been in place in Flanders since 01/01/2015.

However, this optimistic outlook needs to be qualified. Some municipalities claim to be pesticide-free despite legal use of certain products in specific cases. This may be because the law does not yet ban all pesticide use, as is the case for Wallonia and Brussels, or because there are exemptions for certain phytosanitary products which may be used in specific circumstances in Flanders (see points10 and 11). Conversely, other municipalities may have responded “yes” because they have adopted a differentiated approach to green space management and only rarely use pesticides. All the municipalities which responded use alternative methods as part of their land management activities.

2 Why did you decide to reduce/eliminate pesticide use?

(multiple answers possible)



The top answer for the two biggest regions of the country was the to comply with the law. This is therefore the main reason for changes in land maintenance methods. This is more the case for Flanders (84.5%) than for Wallonia (68%). Moreover, the gap between this top response and the next most popular responses (the second most popular response for both regions being biodiversity) is also greater in Flanders than in Wallonia. However, it must be noted that for technical reasons it was not always possible for municipalities to choose more than one response (mainly in Flanders). In these cases, the main response given was to comply with the law. As seen previously (see point 2 above), this result can be explained by the fact that pesticide use has been banned in Flanders since 01/01/2015 except for certain exemptions.

● Brussels
● Flanders
● Wallonie

A biodiversity
B quality waterways
C to comply with the law
D public health
E drinking water supply
F health of gardeners/workers
G economic reasons
H pressure from citizens
I other

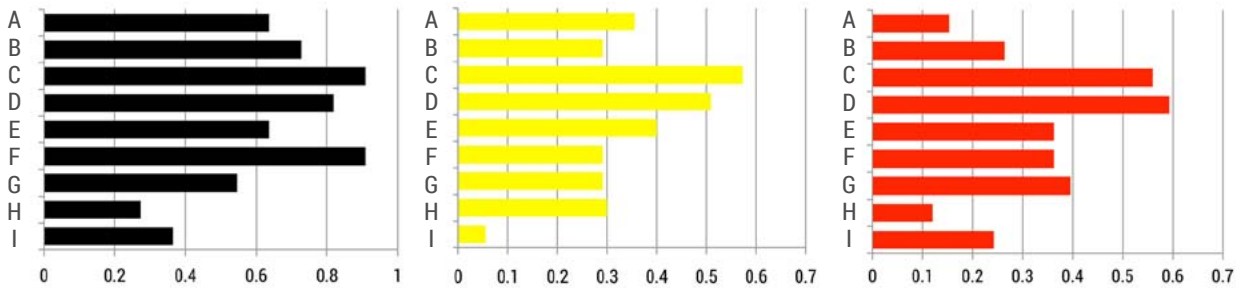
On the other hand, the statistics for the Brussels region are rather different. The top answer pertains to environmental concerns, i.e. biodiversity (91%). Health of gardeners/workers was the next most decisive factor in making the decision, followed by to comply with the law which is equal with public health (72%) in third place.

We would like to emphasise that although some communes have only recently transitioned to zero pesticides, undoubtedly due to the changes in legislation, some of them had in fact already adopted differentiated management for their green areas, leaving spontaneous vegetation to grow in certain areas and allowing pesticide use in others.

3

How have you been able to avoid using pesticides to kill weeds?

(multiple answers possible)



The three graphs above show that municipalities employ many and diverse methods for removing weeds in an environmentally-friendly manner.

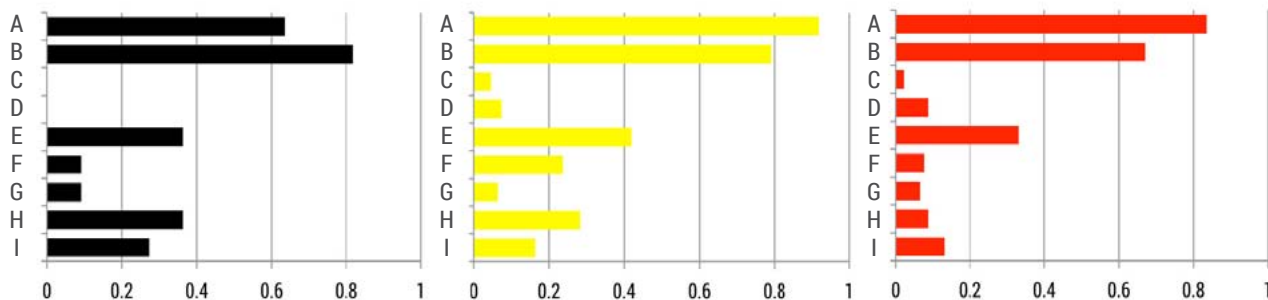
- Brussels
- Flanders
- Wallonie

Ground coverage and mulch are both very popular in all three regions. Some municipalities even highlighted (as can be seen on the graphs) the necessity of using several different methods to ensure a good result. Other solutions also mentioned include using cardboard instead of anti-weed nets, concentrated vinegar, regular repointing etc.

One particular element which emerged from the general results merits further attention: the concept of spontaneous plant growth. The positive scores for this point demonstrate that the mindset of local authorities, and probably citizens as well, is changing with regard to allowing nature to re-enter into public space. This acceptance was not as strong a few years ago if we compare these results with the 2012 report for the Walloon region on the perception of spontaneous vegetation in public space, and the feedback on this point submitted by certain municipalities. The perception of the role of nature in the city is therefore changing.

- A Removal of unnecessary surface coverings
- B Integration of greenery into surfaces
- C Use of ground-cover plants
- D Use of straw or mulch
- E Seeding the land
- F Acceptance of spontaneous plant growth
- G Anti-weed nets,
- H Complete restructuring of soil
- I Other

4 Which alternative land management technique(s) do you use? (multiple answers possible)



A similar trend can be noted in all three regions in that they favour mechanical methods such as brushing and mowing.

The most popular thermal method is the direct flame. In the Brussels Capital Region, this alternative is just as prevalent as hot water.

Table 2 displays the answers to questions regarding the extent of the alternative methods employed (small/large scale) and how they are managed (internally/externally).

● Brussels
● Flanders
● Wallonie

A Sweeper
B Mower
C Jet washer
D High pressure washer
E Direct flame
F Hot air
G Infra-red
H Hot water
I Steam + hot foam

Table 2 extent of usage and type of management by region

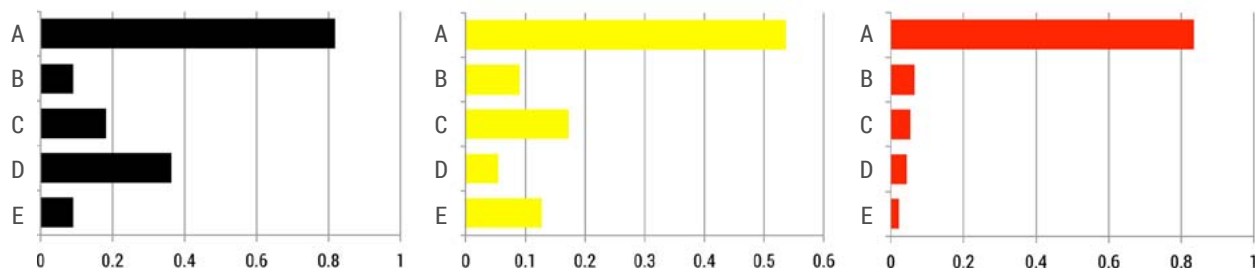
	Small scale	Large scale	Both scales*	Managed internally	Managed externally	Both internal and external management*
Brussels	10	6	6	11	2	2
Flanders	94	67	53	100	36	27
Wallonie	71	66	51	87	10	10

*Municipalities which ticked both responses

In all three regions, small-scale alternative methods for managing unwanted plant growth are more common, but many areas manage both small-scale and large-scale activities internally. Municipalities which employ alternative methods on a small scale are likely to use methods such as hoeing or a small burner, while machines tend to be used for large-scale operations.

The answers pertaining to internal or external management are also similar across the three regions, but the results are even more pronounced. A significant majority of municipalities are opting to employ alternative methods themselves, whereas only a few choose to engage external companies to manage their alternative methods.

5 How do you combat insects/harmful species without the use of pesticides? (multiple answers possible)



When asked about tackling harmful insects

without using chemical pesticides, the practices of nearly all the municipalities in Belgium are similar, in that they do not use any techniques. Pests are there-

fore not tackled. The figures are most significant for Wallonia and

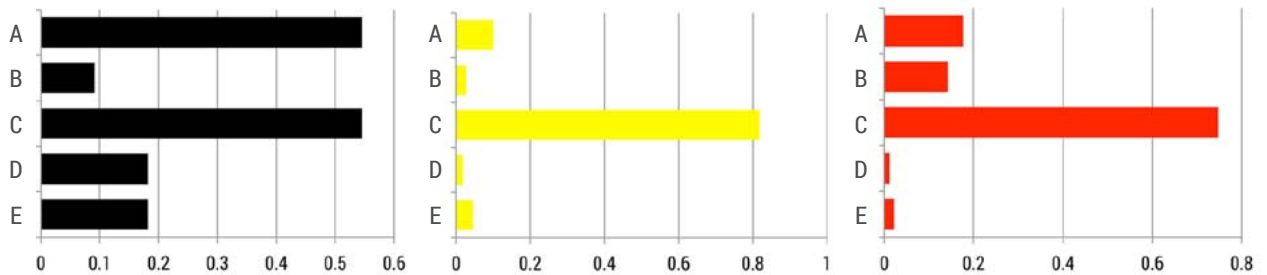
Brussels, where over 80% of municipalities do not employ any techniques. In Flanders, this is true in 50% of cases. Integrated pest management was another popular answer for the municipalities of Brussels. Two municipalities in this region also reported using organic phytosanitary products.

We would like to point out that this question asks how municipalities combat pests without the use of pesticides. Therefore, those who responded no techniques used may in fact be using pesticides.

● Brussels
● Flanders
● Wallonie

A No techniques used
B Traps
C "Organic" phyto-sanitary products
D Integrated protection
E Other preventative methods

6 What alternative methods are used to combat insects such as wasps? (multiple answers possible)

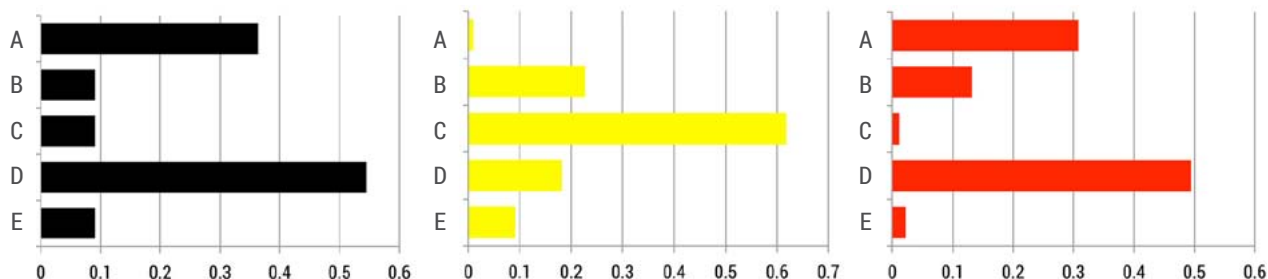


Controlling certain insects such as wasps is a task which many municipalities both in Flanders (82%) and in Wallonia (68%) entrust to the fire brigade. In the Brussels region, we can also observe the same results for this criterion and that of no methods which both have a similar score of 45.5%.

- Brussels
- Flanders
- Wallonie

- A No methods used
- B No methods used except in areas frequented by children
- C Firefighters are responsible for prevention
- D Use of traps
- E Other measures

7 How do you combat other harmful species (e.g. rats, mice) without the use of pesticides? (multiple answers possible)



To combat harmful species, municipalities in both Wallonia and Brussels tend to employ an external company or choose not to act. In Flanders, the order of responses is rather different.

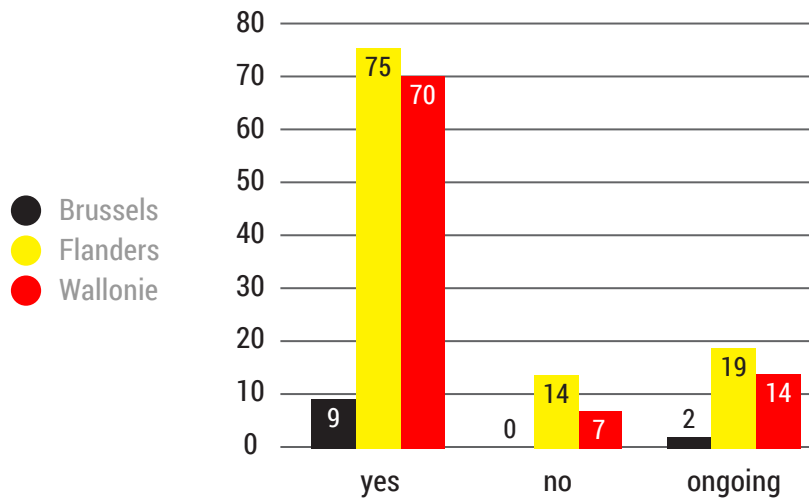
Firstly, the clear majority (i.e. 60%) use integrated protection, followed by traps in second place at a little over 20%. Checks performed by an external company is the third most popular answer ($\pm 18\%$), unlike in the other two regions.

It should be noted that engaging the services of an external company or integrated pest management could imply pesticides being used once again.

● Brussels
● Flanders
● Wallonie

A No methods used
B Traps
C Integrated protection
D Checks performed by an external company
E Other preventative techniques

8 Have you implemented any maintenance and green space management techniques to encourage bees and wild pollinating insects? (single response possible)



Breakdown of responses by region

Most municipalities have implemented or are currently implementing techniques to encourage bees and other wild pollinating insects, such as wildflower meadows, melliferous and indigenous plants, insect hotels or late scything. Several initiatives to encourage pollinating insects³, whether begun by citizens, politicians or associations, have sprung up during the past few years. Various plans have been introduced in the three regions to encourage or integrate pollinating insects, including the Maya plan⁴ for the Walloon region, the charter for the Flemish region⁵, and the Nature plan⁶ for the Brussels region.

3) Advice on how to encourage bees and pollinating insects can be found in Chapter 2, Point 8 in the Stories & Principles section of the following website: <http://www.pesticide-free-towns.info/stories-principles>

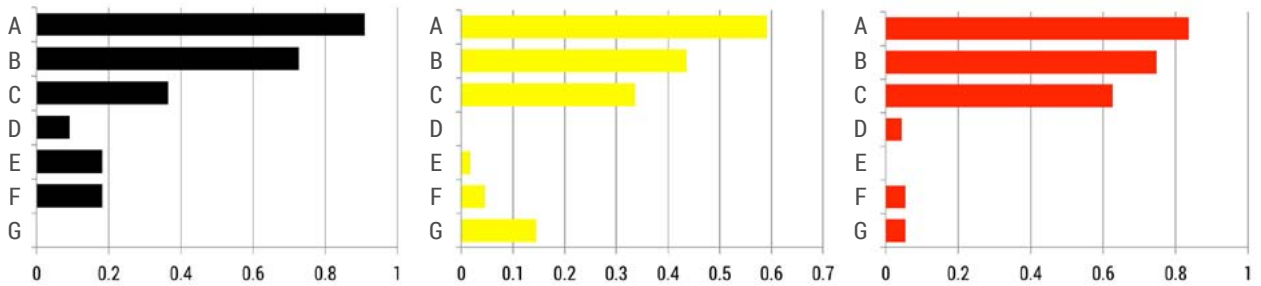
4) A description of the Maya Plan can be found at this link: <http://biodiversite.Wallonia.be/fr/plan-maya.html?IDC=5617>

5) The content of the charter can be viewed at this link:

<http://www.konvib.be/images/stories/nieuws/charter%20bij%20vriendelijke%20gemeente.pdf>

6) Details of the Nature Plan can be found here: http://document.environnement.brussels/opac_css/elecfile/ProjetNAPLAN-fr

9 Have you had problems with any invasive plant species? If so, which? (multiple answers possible)

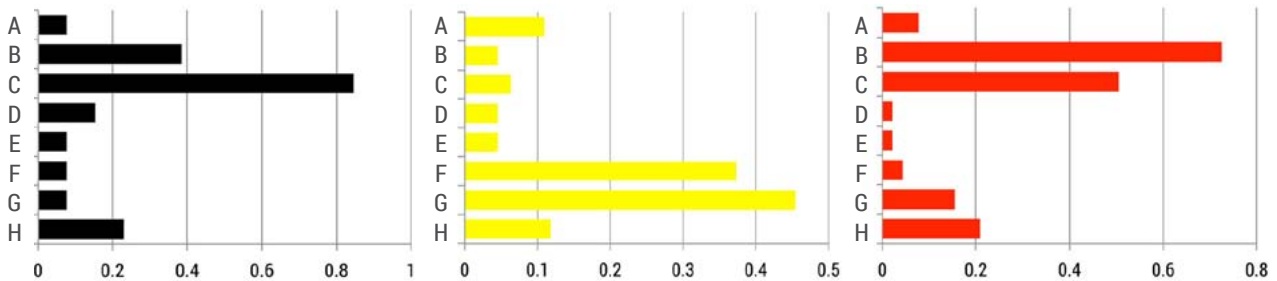


As we can see, almost all municipalities have issues with invasive plants, particularly Japanese Knotweed, Giant Hogweed and Himalayan Balsam.

● Brussels
● Flanders
● Wallonie

A Japanese Knotweed
B Giant Hogweed
C Himalayan Balsam
D Black cherry
E Rhododendron
F Black locust
G Other

10 What method(s) have you implemented to combat invasive plant species? (multiple answers possible)



It appears upon analysing these graphs that chemical substances are used in Flanders to tackle invasive plant species (phytopharmaceutical products (PPPs): injection or pulverisation), whereas mechanical methods (cutting and scything) are more popular in Wallonia and Brussels.

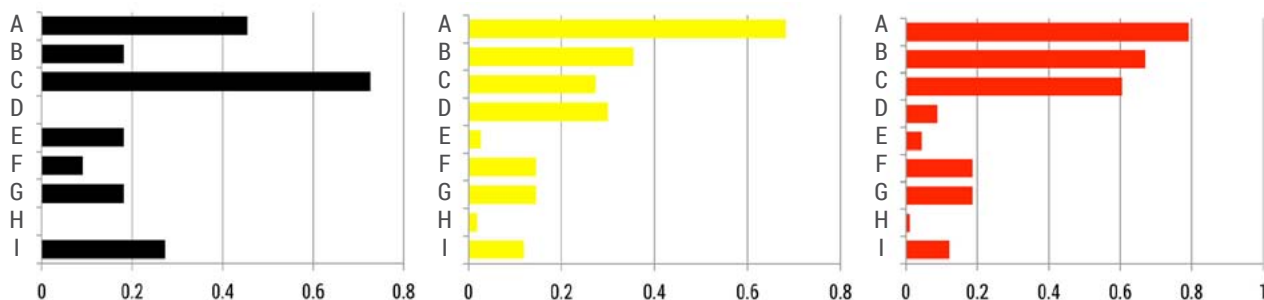
● Brussels
● Flanders
● Wallonie

A No methods used
B Cutting below the root collar
C Scything
D Deep ploughing
E Grazing
F PPP: pulverisation
G PPP: injection
H Other

The legislation in these regions contains exemptions which allow the continued use of pesticides for certain types of problems (see point 2 above). We can observe that certain areas prefer to eliminate invasive plant species by applying phytopharmaceutical products (PPPs) either via injection or pulverisation. However, these areas still consider themselves to be pesticide-free. This is true for 56 of the 77 Flemish municipalities who state that they no longer use pesticides. They are right to claim to be pesticide-free as they are making use of legal exceptions. However, we fear that in future, these kinds of exceptions will become the norm and municipalities will continue to choose the option of using pesticides, even though there are alternative methods available for combatting invasive plant species⁷.

7) Advice on eliminating invasive species can be found in Chapter 3, Point 12 in the Stories & Principles section of this website: <http://www.pesticide-free-towns.info/stories-principles>

11 Which areas are most problematic in your pesticide-free management approach? (multiple answers possible)



Cemeteries, sports grounds and pavements without repointing are problematic for all three regions⁸. For the two biggest regions, Flanders and Wallonia, cemeteries are the trickiest areas, particularly the spaces between graves which pose a problem to 70% of respondents, followed by on graves. This is more the case for Wallonia with around 67%, whereas the result was 35% for Flanders. Pavements without repointing are in equal place. However, sports grounds: natural lawn present slightly more problems than pavements in Flanders.

● Brussels
● Flanders
● Wallonie

A Cemeteries: Between graves
B Cemeteries: On graves
C Slabs without repointing (paving slabs/pavements)
D Sports grounds: Natural lawn
E Sports grounds: Artificial grass
F Sports grounds: Gravel
G Sports grounds: Dolomite
H Sports grounds: Other
I Other

For the Brussels region, pavements without repointing are the main problem area followed by cemeteries, where both the spaces between graves and on graves are problematic.

⁸) Advice on maintaining cemeteries can be found in Chapter 3, Point 13 in the Stories & Principles section of this website: <http://www.pesticide-free-towns.info/stories-principles>

12 Perception of the work carried out by municipalities to reduce pesticide use

Table 3 Does your city/municipality actively seek to learn out about the alternatives used by other cities/municipalities?

	Wallonie	Brussels-Capital Region	Flanders
Often	46	5	39
Sometimes	38	4	60
Rarely	6	2	8
Never	0	0	3
	90	11	110

Table 4 Do you think that you are doing more than other cities/municipalities to reduce pesticide use?

	Wallonie	Brussels-Capital Region	Flanders
Yes	21	2	22
No	22	4	38
No opinion	48	5	50
	91	11	110

We have grouped these last two questions under a single heading, as they both have to do with gauging the opinions of the municipalities on their pesticide-free public space management activities. We can observe in **Table 3** that many municipalities state that they sometimes seek to find out about alternative methods used by other municipalities. This implies that exchanges of information are taking place, at least occasionally, about the environmentally-friendly techniques which are currently available. We can see in **Table 4** that around 25% of the municipalities in each region believe they are doing more than others to reduce pesticide use, which we consider to be an encouraging result.

CONCLUSION

Our study has shown that 60% of respondents consider themselves to be “pesticide-free towns” and that their main reason for reducing pesticide use is to comply with the law. As a result, alternative methods and tools are being used to remove weeds such as ground-cover plants and mulch, or the use of sweepers and mowers.

Moreover, for many years now, a growing number of municipalities have been employing an integrated land management approach for their green spaces, whether or not they consider themselves to be pesticide-free towns. Towns also communicate with each other to find out more about alternative methods. There is therefore a growing awareness in Belgium of the issue of pesticides and the alternative options for managing public spaces.

Nevertheless, municipalities sometimes have maintenance issues for which they turn to pesticides, such as when dealing with insects, wasps or harmful pests, combating invasive plant species, and maintaining certain areas such as cemeteries or non-repointed pavements. We will need to monitor these points closely in future. Current (and possibly future) exemptions continue to allow the use of chemical products for these particular cases, but they must be seen as a step in the transition towards zero pesticides: they must not become the rule. This can be achieved by a communication and awareness-raising campaign on the freely available, existing alternative methods and their advantages, as despite what the results seem to portray, pesticide use is still widespread in Belgian towns.



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