Announcing the beginning of the pollen season, does the alder also announce summer?

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Results

Annecy – Alder’s pollens in 2016

Garins/m3/day

1-Feb 1-Mar 1-Apr 1-May 1-Jun 1-Jul

MedPolyn 2017
Interrogations

- Was it really alder pollens?
- Only this year?
- Only on this station?
- Only in France?
Alder’s pollen

- Oblate grain, stephanoporate (4 to 5 pores), diameter: 25 µm.

- Annuli around the pores and arci stretching between each pore. Oval pores.
ANNECY – Since five years

Annecy – Alder’s pollen

Grains/m³/day


1-Jan | 1-Feb | 1-Mar | 1-Apr | 1-May | 1-Jun | 1-Jul
ANNECY – in June

Annecy – Alder’s pollen

Grains/m³/day

- 2016
- 2015
- 2014
- 2013
- 2012

1-May 16-May 31-May 15-Jun 30-Jun 15-Jul 30-Jul

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In France

Bourg en Bresse
Annemasse
Annecy
ANNEMASSE – in June

Annemasse – Alder’s pollen

Grains/m³/day


BOURG EN BRESSE – in June

Bourg en Bresse – Alder’s pollen

Grains/m³/day


In Switzerland
Genève – in June

Genève – Alder’s pollen

Grains/m³/day


Neuchâtel – in June

Neuchâtel – Alder’s pollen

- 2016
- 2015
- 2014
- 2013
- 2012

Grains/m3/day

Visp – in June

Visp – Alder’s pollen

Grains/m3/day

0 20 40 60 80 100 120 140 160 180


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Buchs – in June

Buchs – Alder’s pollen

Grains/m3/day


0 50 100 150 200 250


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Why Buchs?

Buchs – Alder’s pollen – average values on 5 years

Grains/m3/day

Early season

Typical season

Late season
Other sites in Switzerland

**Genève - Alder’s pollen – average values on 5 years**

**Visp - Alder’s pollen - average values on 5 years**

**Neuchâtel - Alder’s pollen – average values on 5 years**
<table>
<thead>
<tr>
<th>3 seasons</th>
<th>January</th>
<th>February to April</th>
<th>May to July</th>
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</thead>
<tbody>
<tr>
<td><strong>FRANCE</strong></td>
<td></td>
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<tr>
<td>Annecy</td>
<td>1941,39</td>
<td></td>
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<td>2425,5</td>
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<td>Bourg en Bresse</td>
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<td>Grenoble</td>
<td>2210,63</td>
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<td>130</td>
<td>3886</td>
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<td>Visp</td>
<td>267</td>
<td>1505</td>
<td>421</td>
</tr>
<tr>
<td>Neuchâtel</td>
<td>62</td>
<td>2056</td>
<td>125</td>
</tr>
</tbody>
</table>
Why?

Three seasons
Typical season

- Main alders found in France:
  - Alder glutinous: *Alnus glutinosa*, tree of the family Betulaceae, it is frequently found near rivers
  - Alder of Corsica: *Alnus cordata*

- Pollination period in February - March
Late season

- Alders found in altitude:
  - Alder green: *Alnus viridis*, tree found in the Alps
  - Places and distribution: Rocky slopes and ravines; Forms colonies above the forest boundary; Pre-alpine zones

- Pollination period in June (April - June - July)
Early season

- Alders found in cold zones:
  - Alder of Spaeth: *Alnus spaethii*
  - Decorative tree issued from a cross between a Caucasian alder and a Japanese or Siberian alder
  - It supports pollution
  - Planted in the cities because of its beautiful foliage and its strong resistance to winter (including Buchs)
- Pollination period: its flowering starts around Christmas
Highlight: a study made at Buchs

- Earlier symptoms related to the appearance of the first alder pollens of Spaeth
- Symptoms appearance is quicker for the adults (compared to other alder's pollens)
- Symptoms appearance is even quicker for the children

Conclusion

- Monitoring the beginning of alder pollens in the high mountains in June
- Questioning the presence of Spaeth alder
- Start monitoring as soon as possible
Thank you for your attention