

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

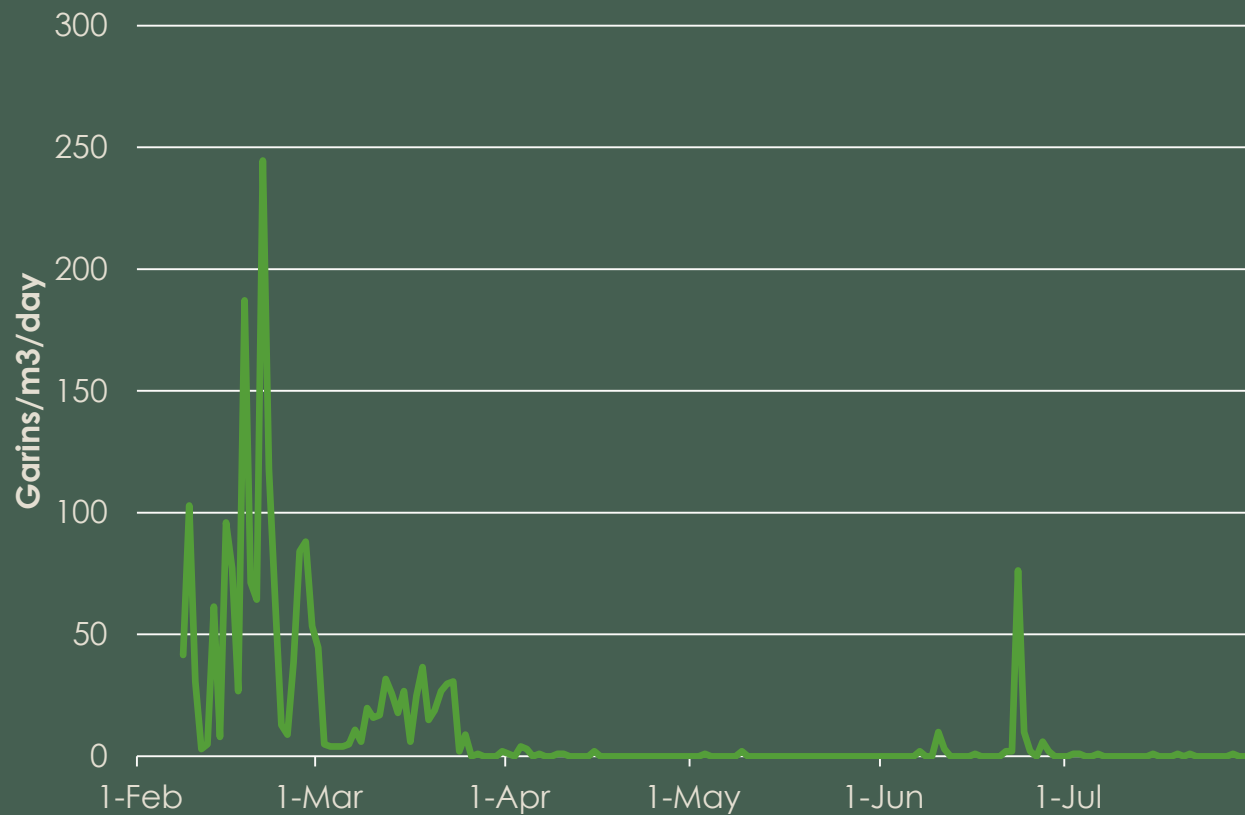
Charlotte SINDT

Michel THIBAUDON

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Results

Anancy – Alder's pollens in 2016

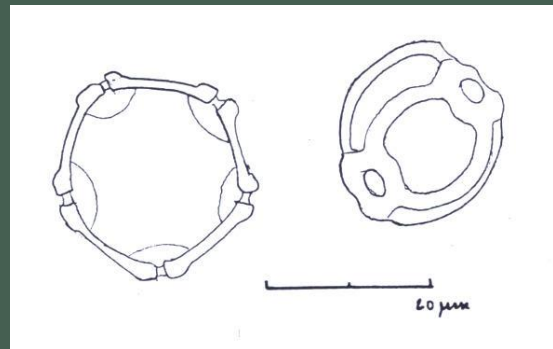


Interrogations

- Was it really alder pollens?
- Only this year?
- Only on this station?
- Only in France?

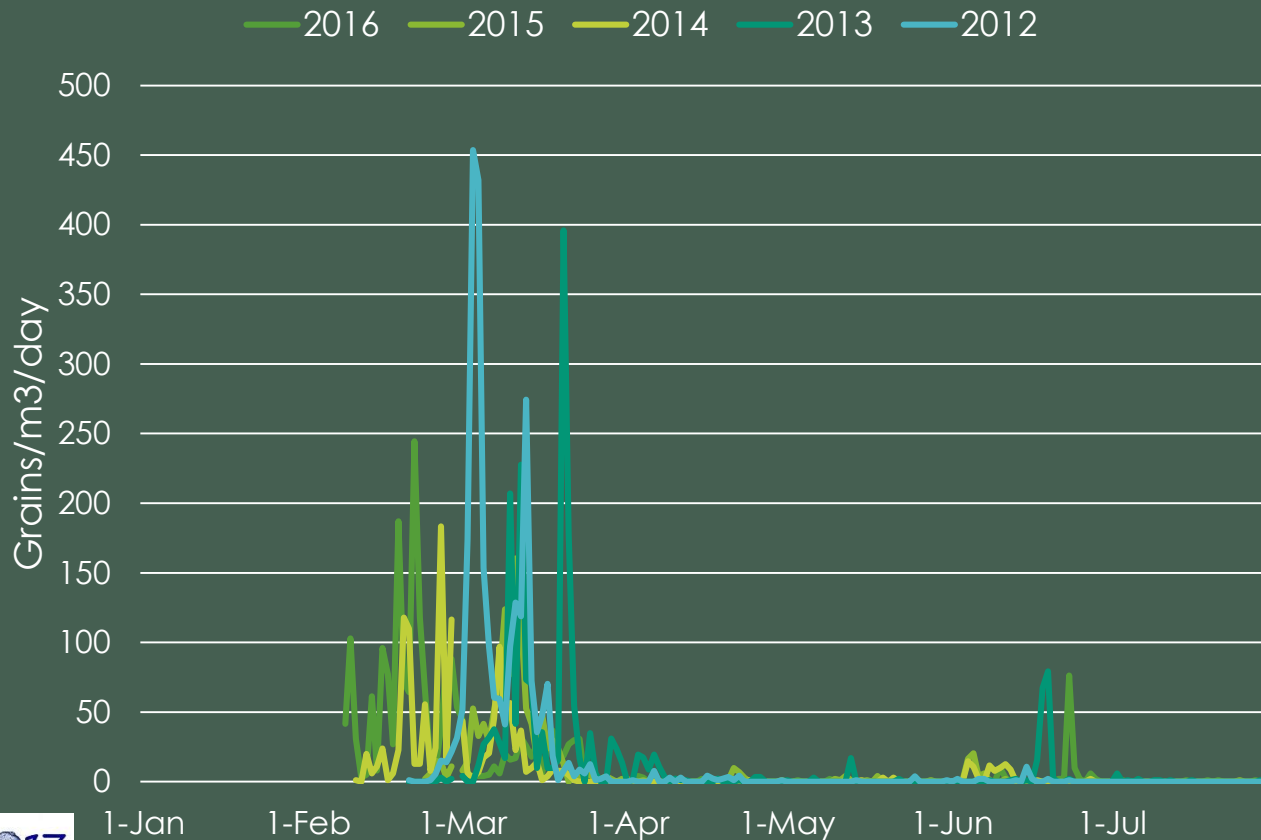
Alder's pollen

- Oblate grain, stephanoporate (4 to 5 pores), diameter : 25 μm .
- Annuli around the pores and arci stretching between each pore. Oval pores.

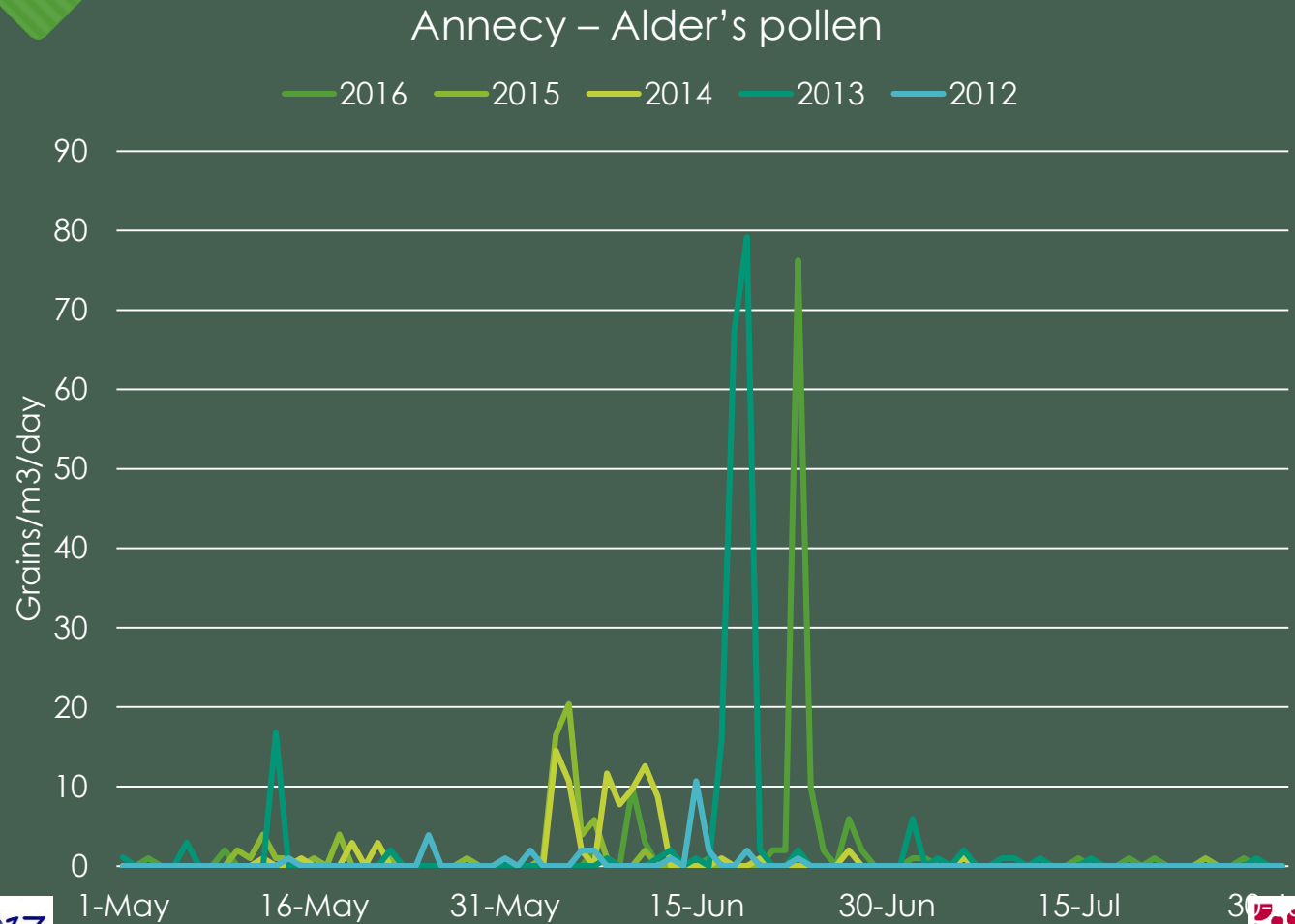


ANNECY – Since five years

Annecy – Alder's pollen



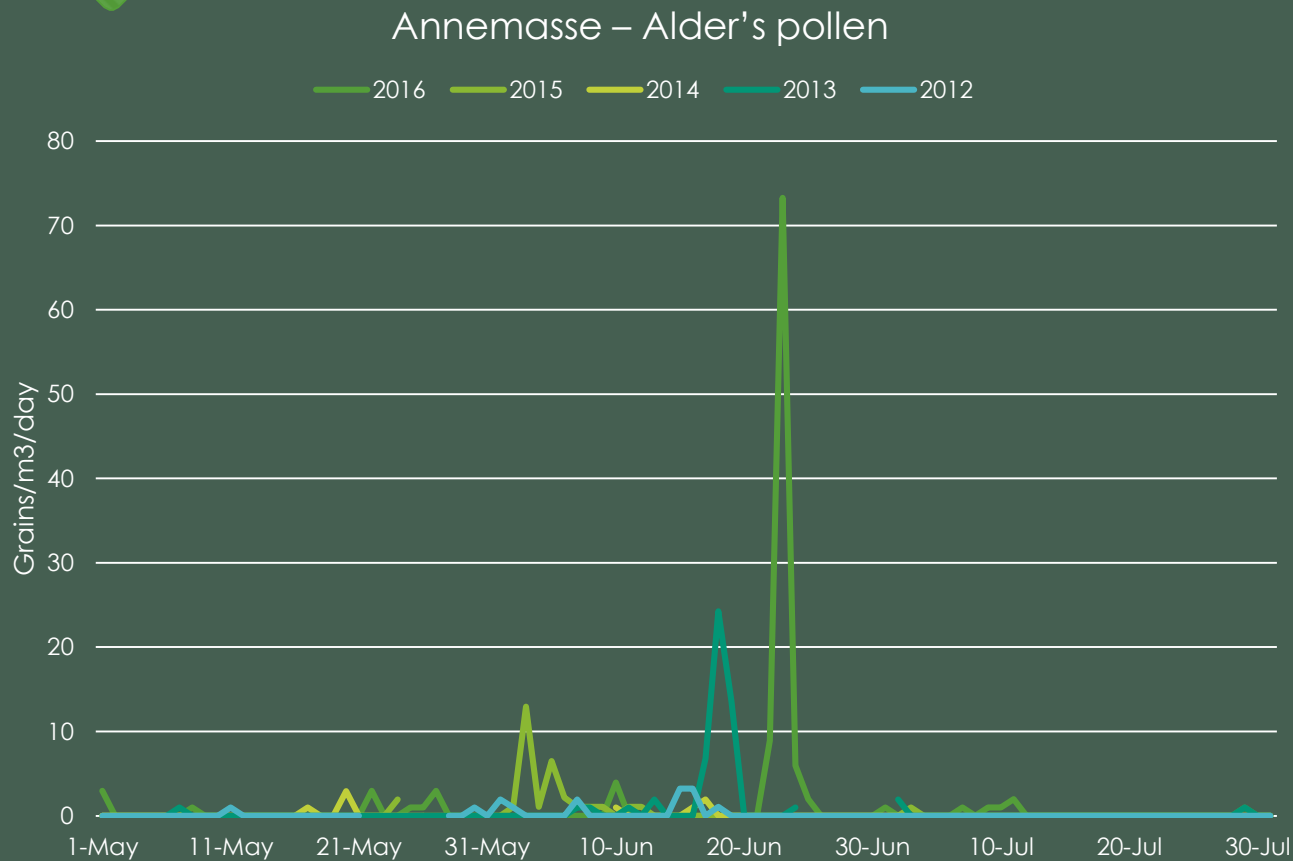
ANNECY – in June



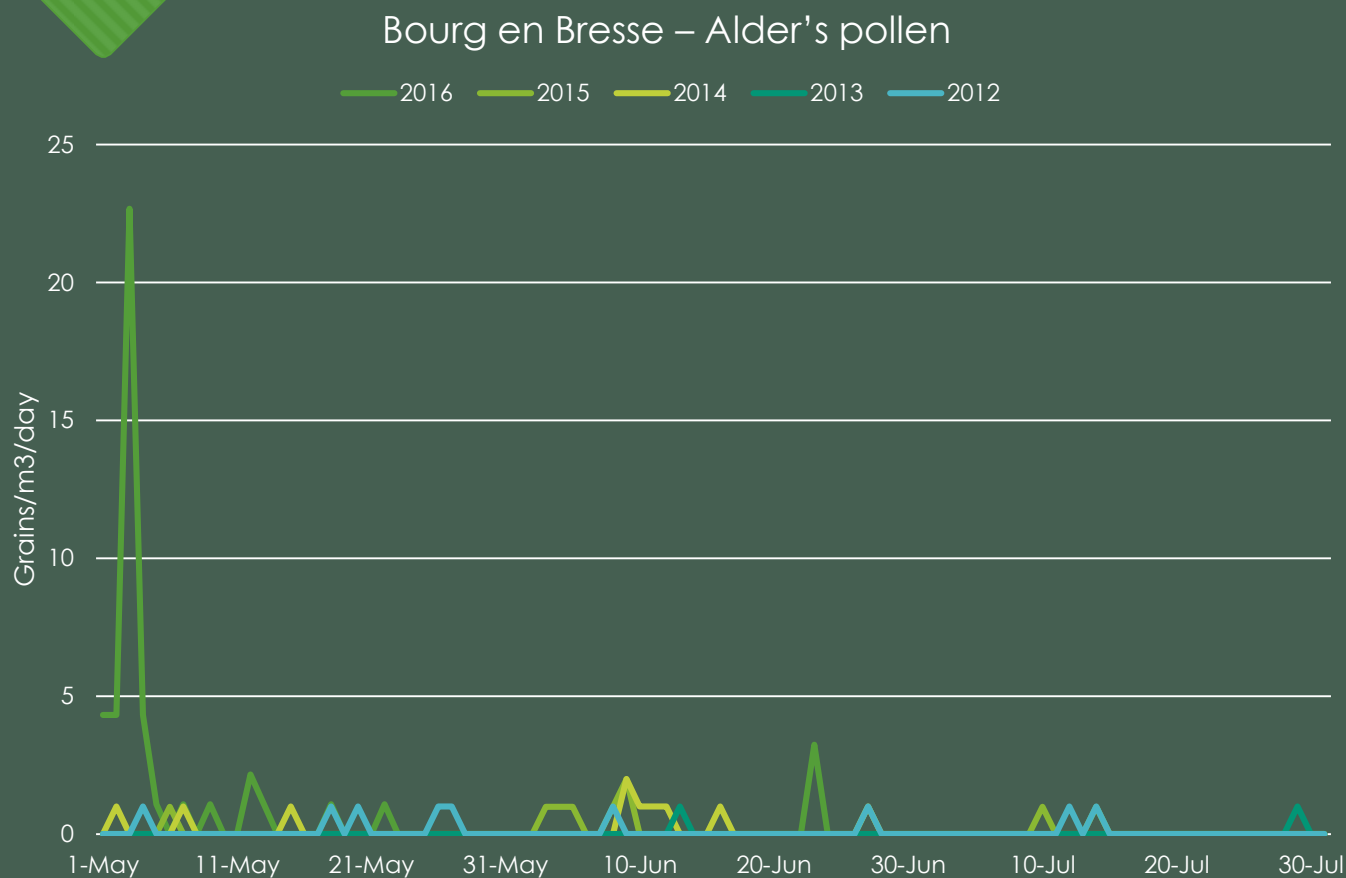
In France



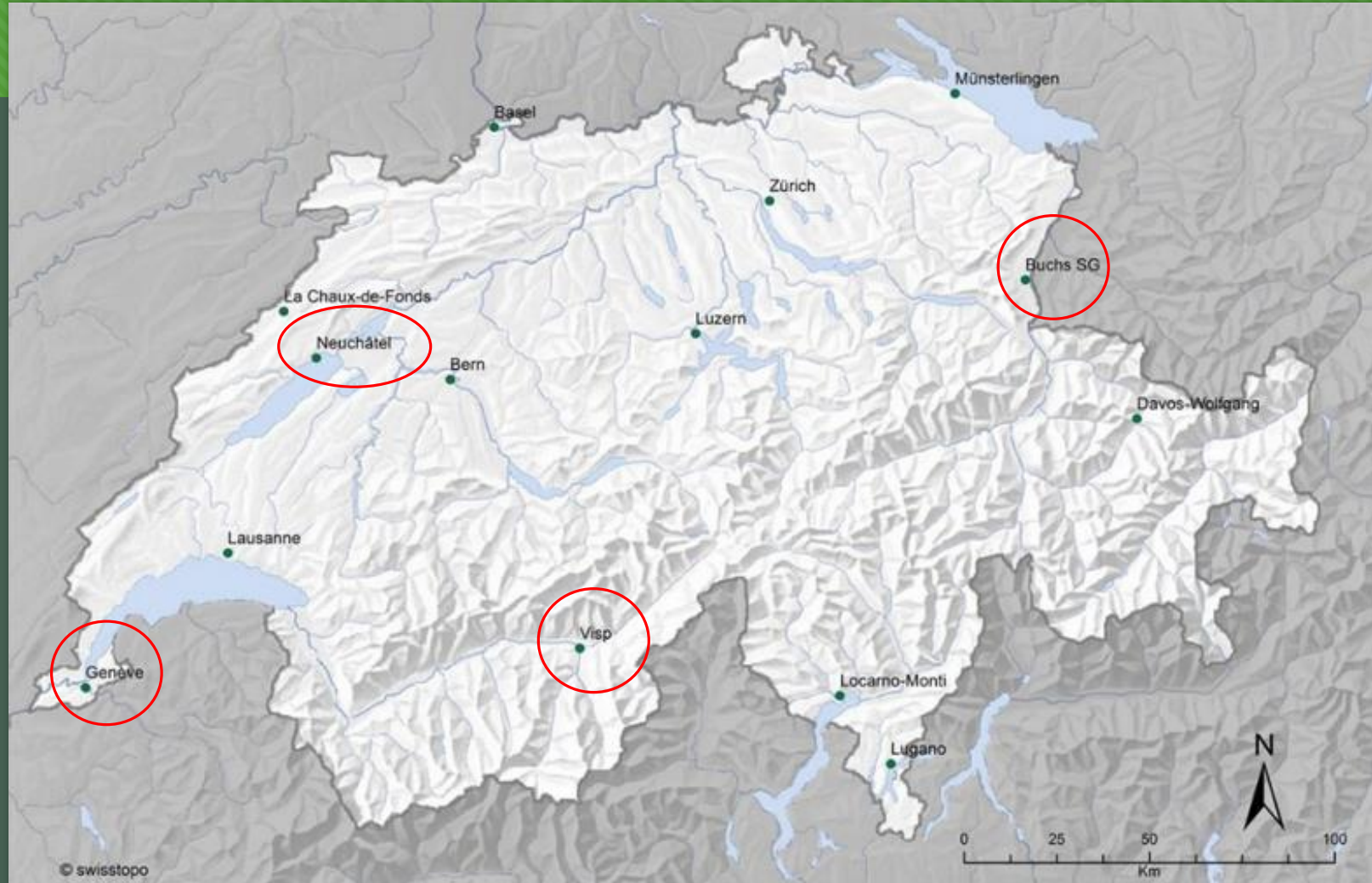
ANNEMASSE – in June



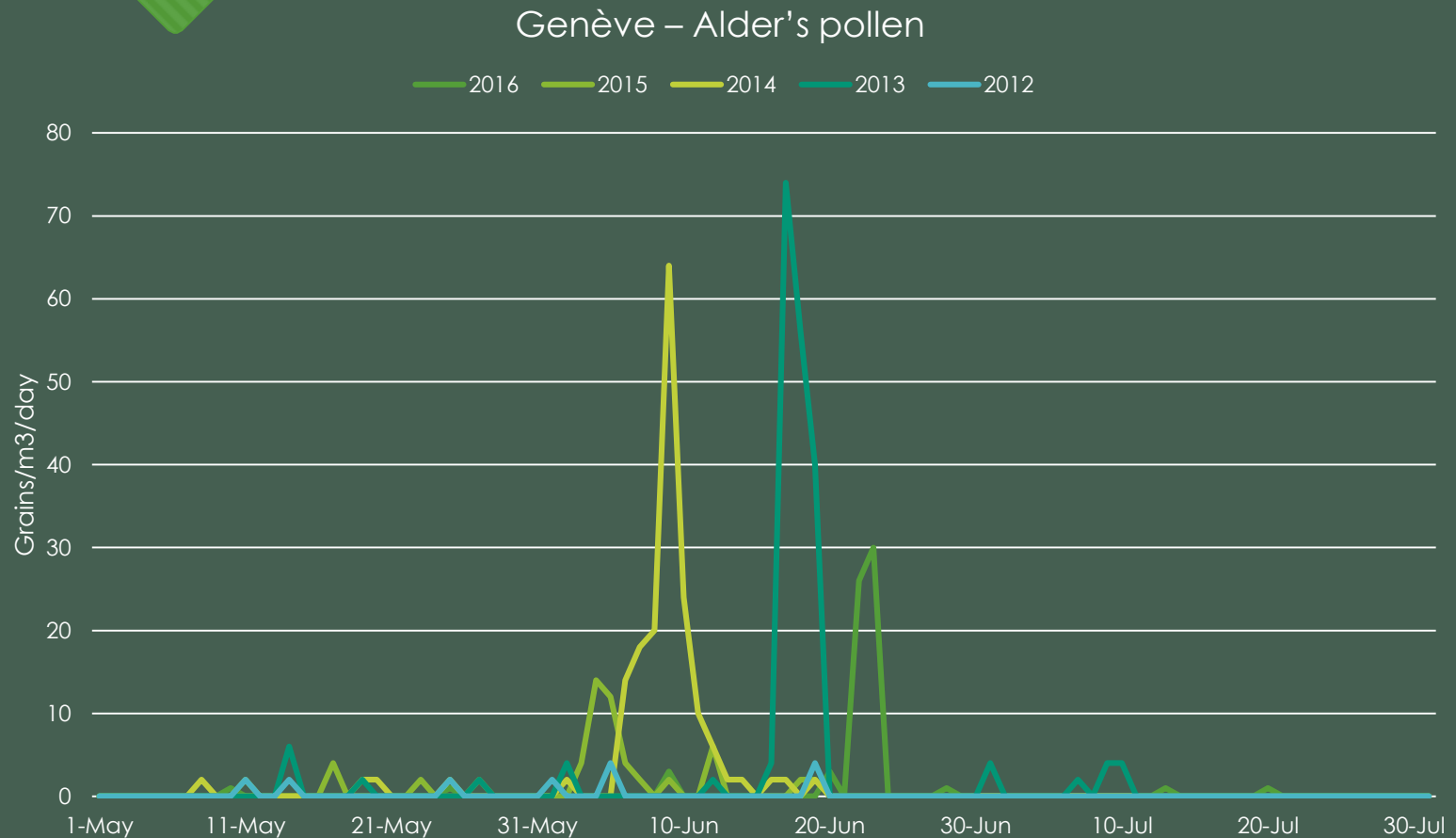
BOURG EN BRESSE – in June



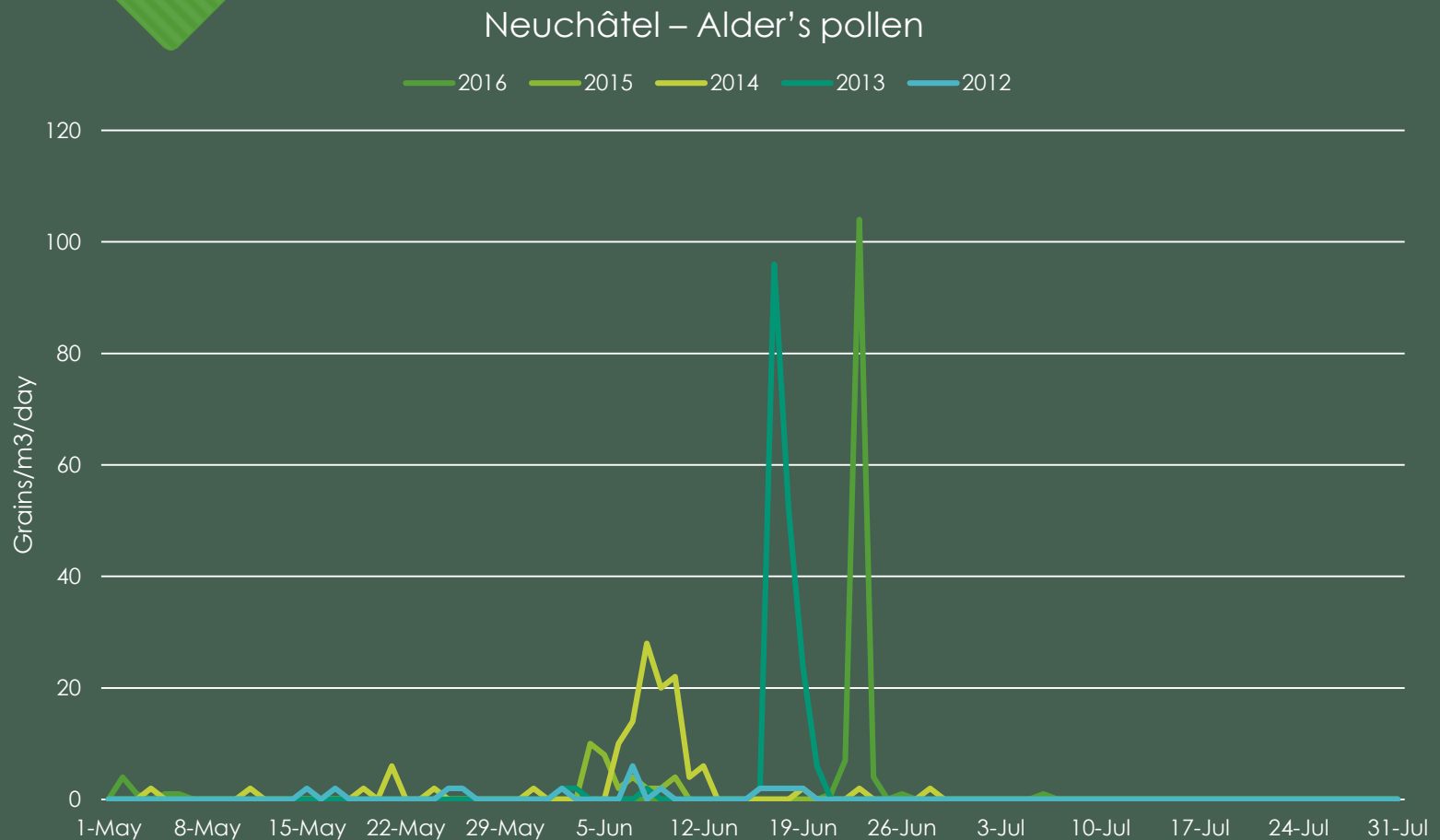
In Switzerland



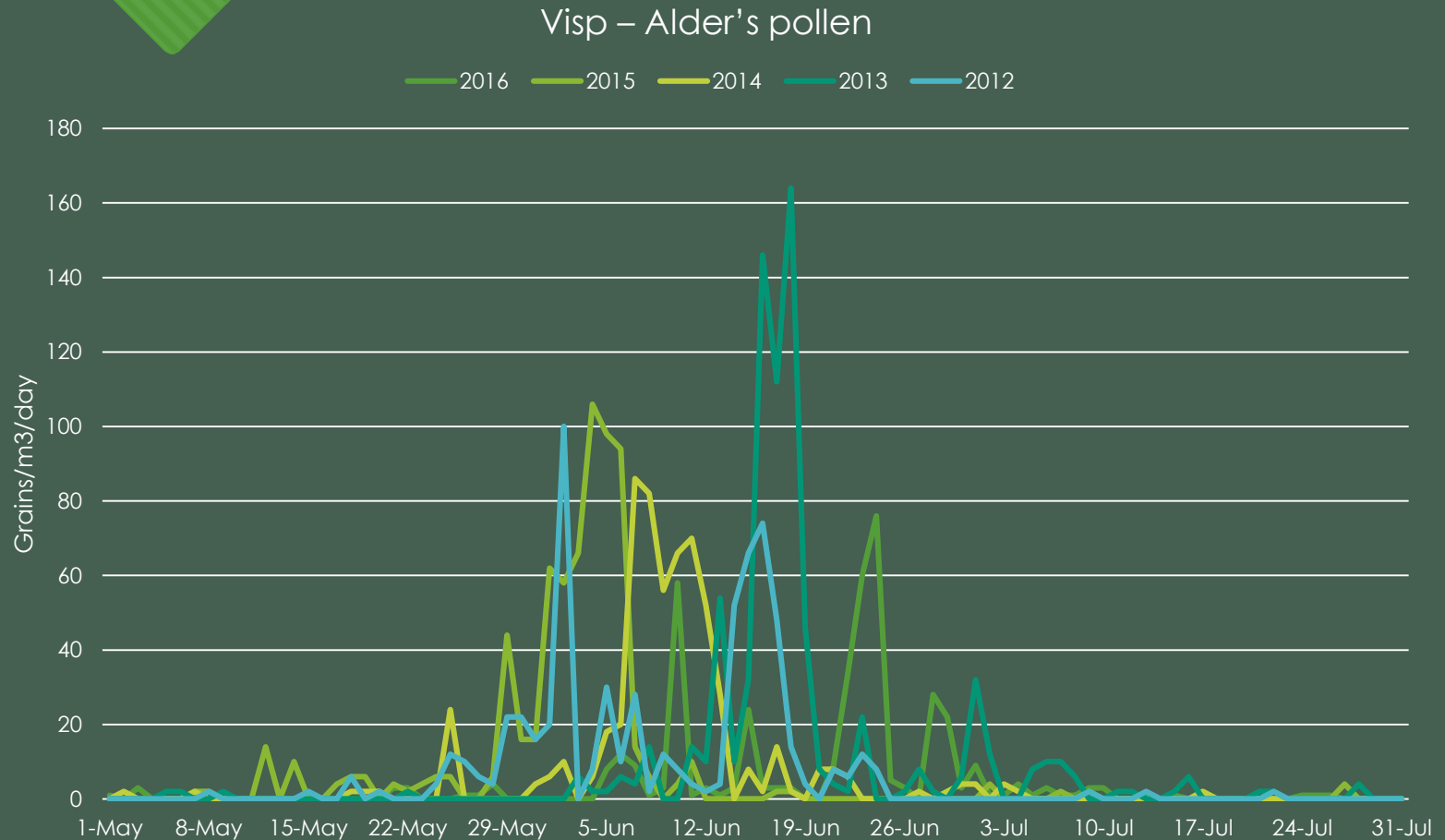
Genève – in June



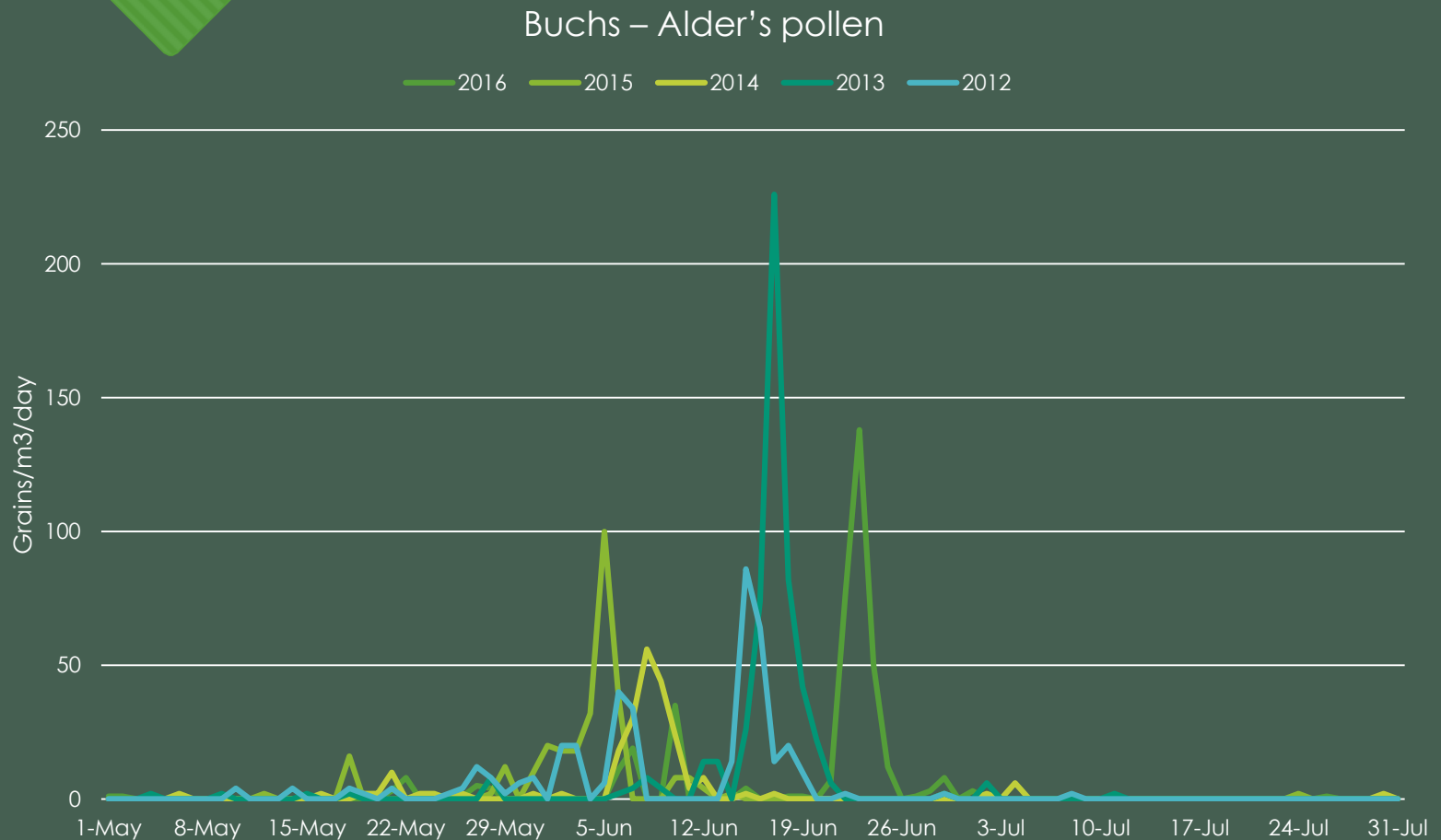
Neuchâtel – in June



Visp – in June

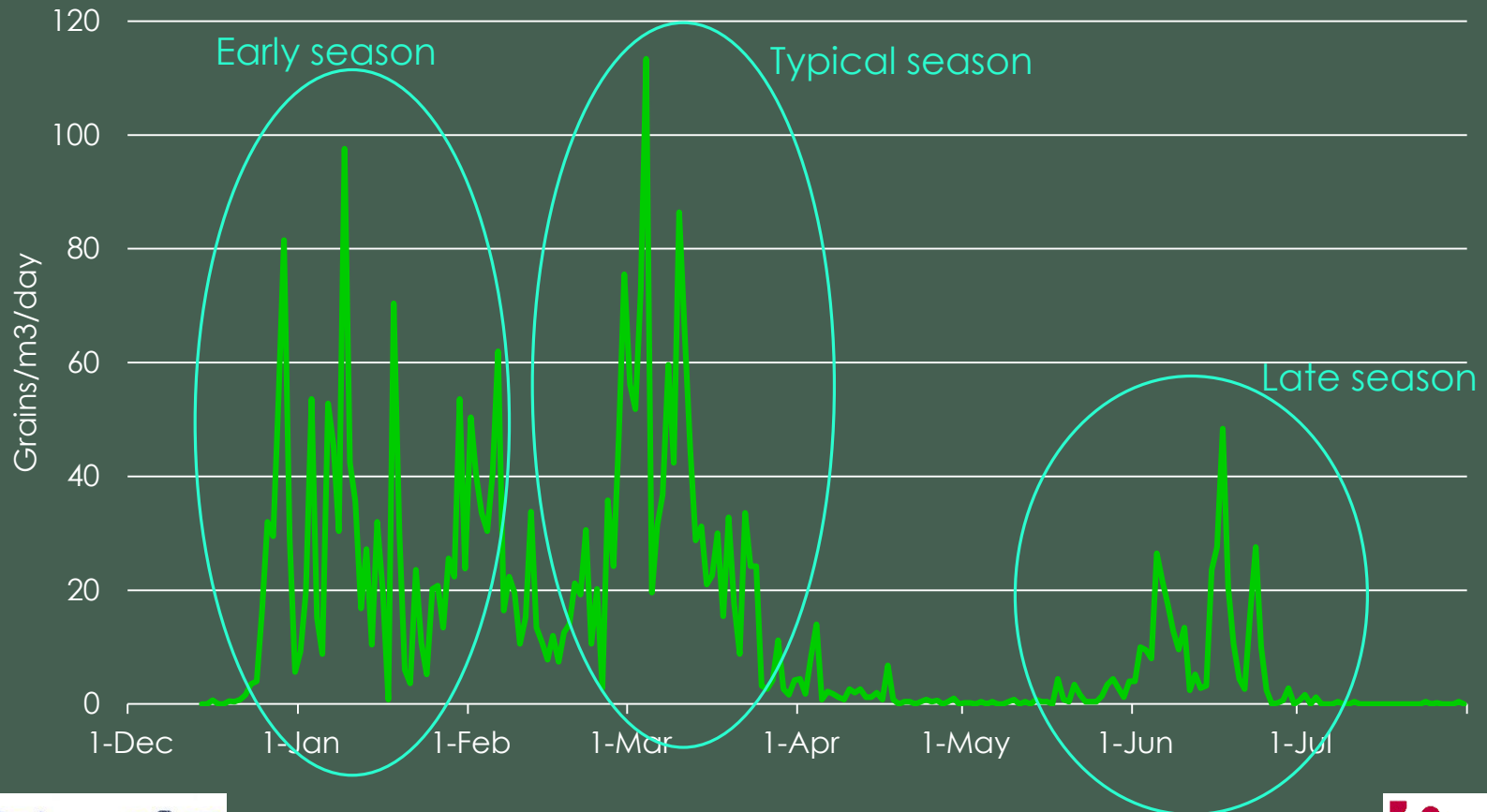


Buchs – in June



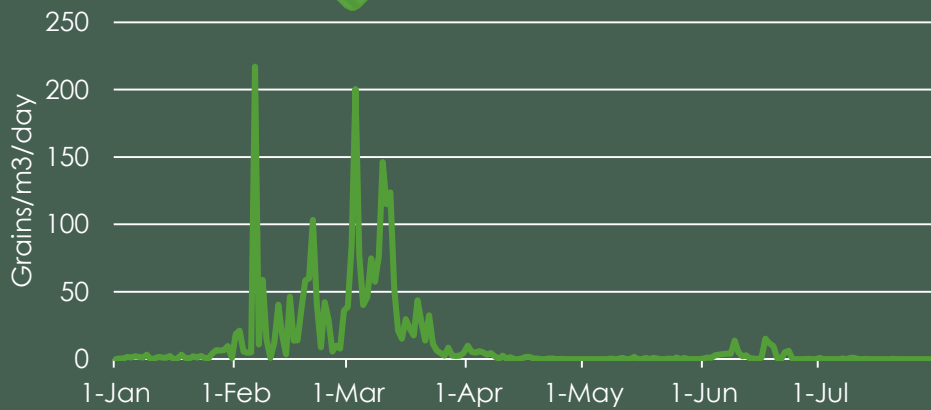
Why Buchs ?

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

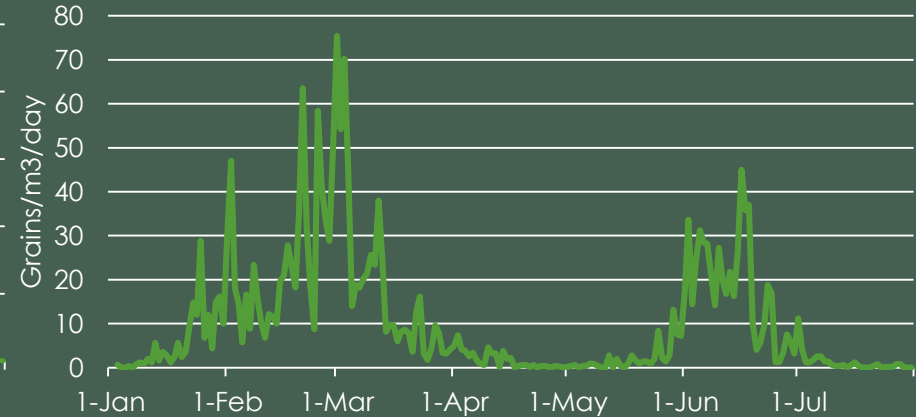


Other sites in Switzerland

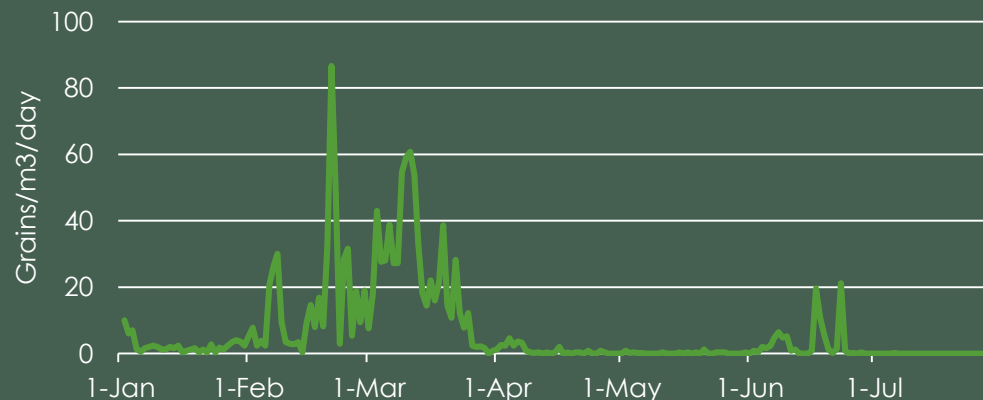
Genève - Alder's pollen – average values on 5 years



Visp - Alder's pollen - average values on 5 years



Neuchâtel - Alder's pollen – average values on 5 years



2016

3 seasons	January	February to April	May to July
FRANCE			
Annecy		1941,39	125,73
Annemasse		2425,5	112,86
Besançon		2306,81	0,97
Bourg en Bresse		5223,41	47,52
Grenoble		2210,63	0,97
Switzerland			
Buchs	817	2248	393
Genève	130	3886	67
Visp	267	1505	421
Neuchâtel	62	2056	125

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



Early season

- 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



Gassner, M., Gehrig, R., & Schmid-Grendelmeier, P. (2013). *Hay fever as a Christmas gift*. *New England Journal of Medicine*, 368, 393–394.

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

