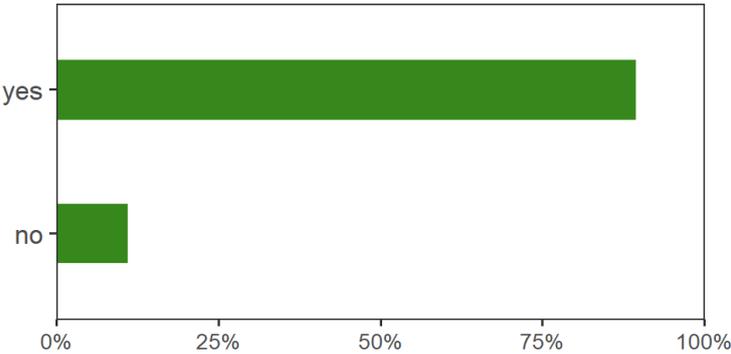


S2: Detailed Answers

Set 1: European potato farmers' perception of climatic changes and experienced impact on potato production.

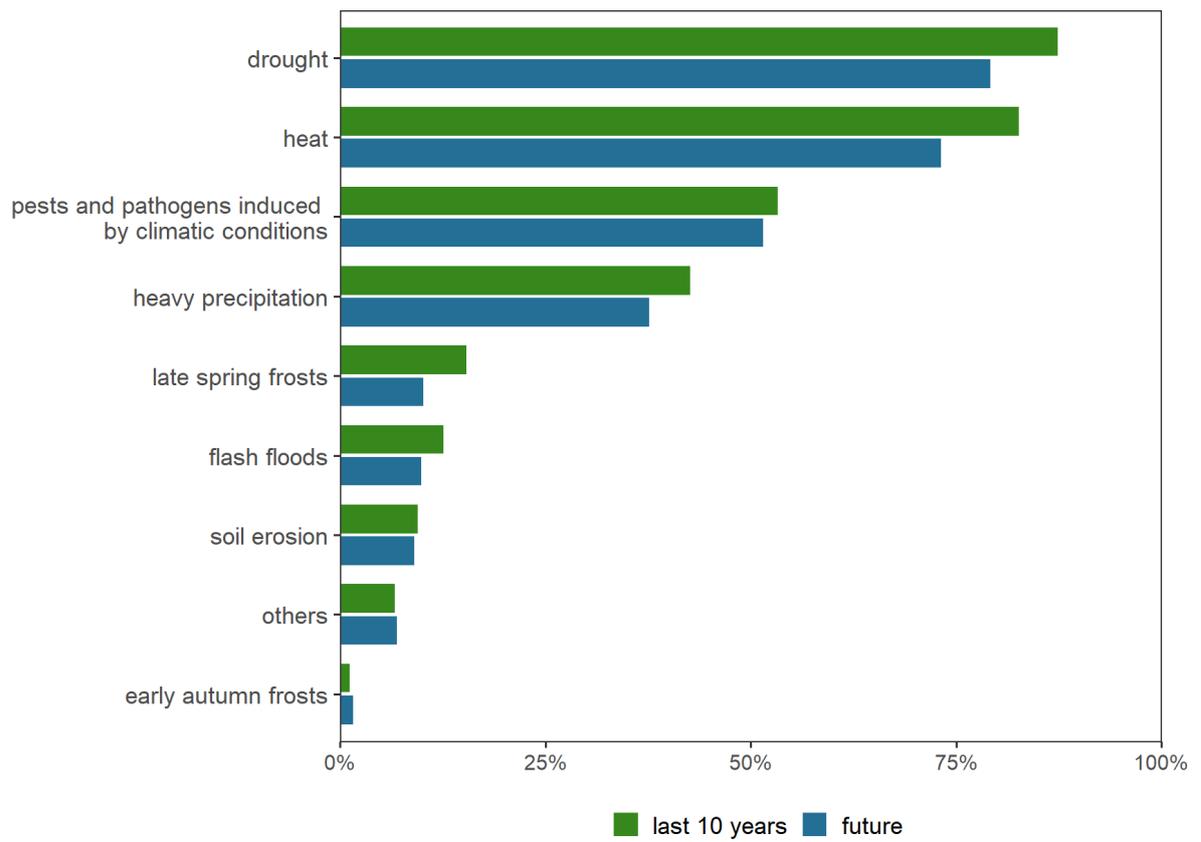
Q1: Do you believe that in the last 10 years changes in climatic conditions have affected your potato production?

	n	%
yes	493	89.2
no	60	10.8
total	553	100.0



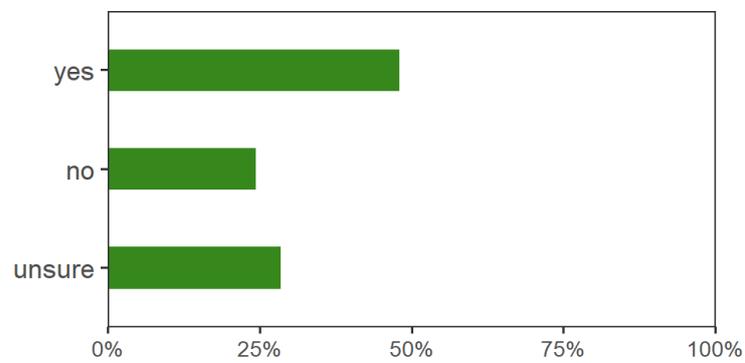
Q2 (additional, only if Q1 was answered with yes) & Q3: Which effect(s) related to climatic changes do you feel has (have) increasingly impacted your potato production in the last 10 years? In your opinion, which effect(s) related to climatic changes will negatively affect your future crop production the most? (Multiple choice)

	Last 10 years (N=493)		Future (N=553)	
	n	%	n	%
drought	431	87.4	438	79.2
heat	407	82.6	405	73.2
pests and pathogens induced by climatic conditions	263	53.3	285	51.5
heavy precipitation	210	42.6	208	37.6
late spring frosts	76	15.4	56	10.1
flash floods	62	12.6	55	9.9
soil erosion	47	9.5	50	9.0
others	33	6.7	38	6.9
early autumn frosts	6	1.2	9	1.6



Q4: Do you believe climatic changes are a threat to maintain potato production at your farm?

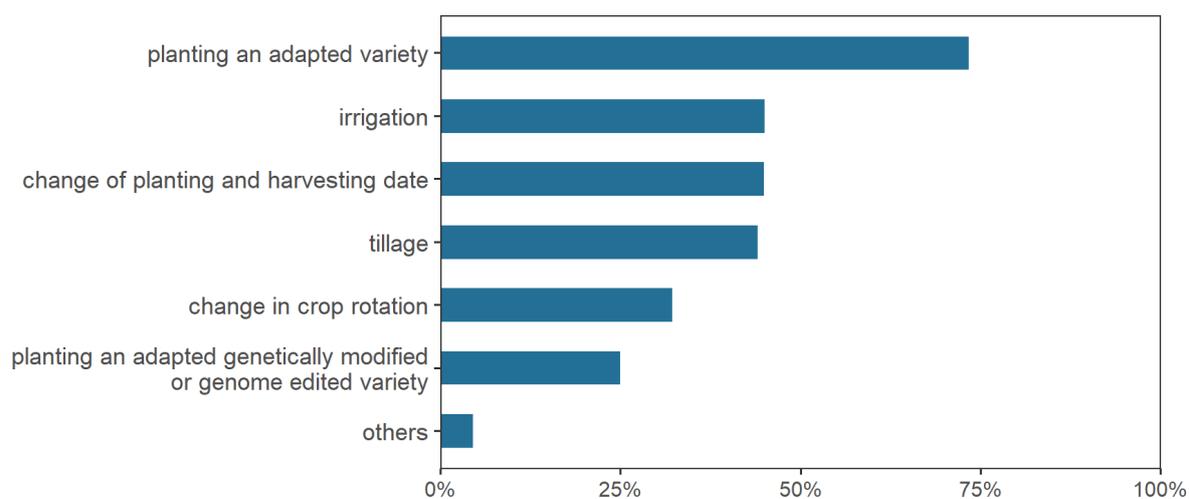
	n	%
yes	264	47.7
no	133	24.1
unsure	156	28.2
total	553	100.0



Set 2: European potato farmers’ pursued adaptation strategies and in-depth information about adaptation strategy “variety choice”.

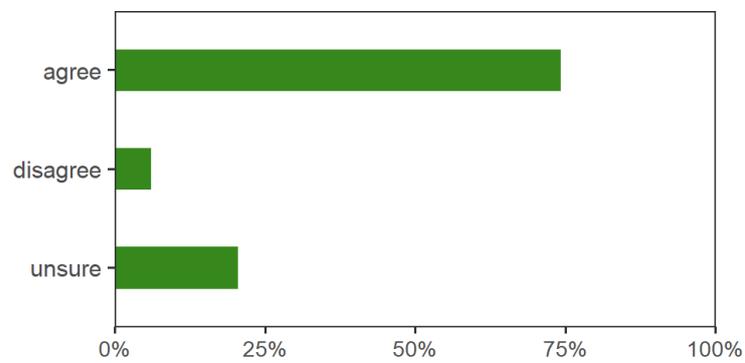
Q5: Which adaptation strategies to climate changes are you willing to implement? (Multiple choice)

N=553	n	%
planting an adapted variety	405	73.2
irrigation	248	44.8
change of planting and harvesting date	247	44.7
tillage	243	43.9
change in crop rotation	177	32.0
planting an adapted genetically modified or genome edited variety	137	24.8
others	24	4.3



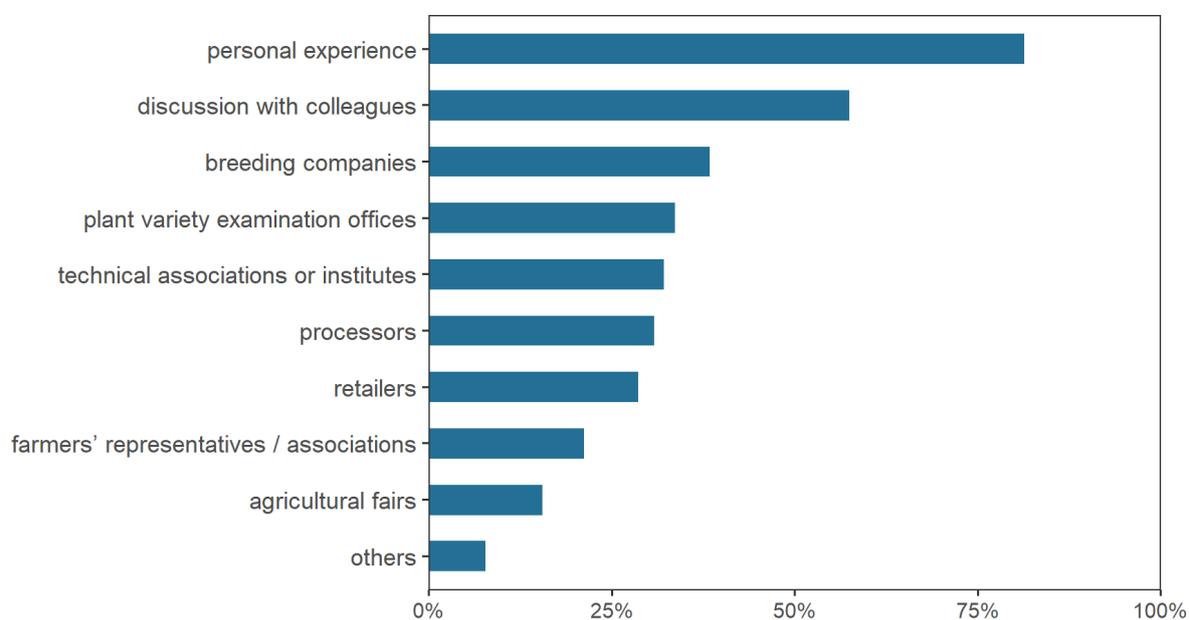
Q6: Do you believe that the impact of climatic changes on potato production can be reduced by the choice of an adapted variety?

	n	%
agree	409	74.0
disagree	32	5.8
unsure	112	20.3
total	553	100.0



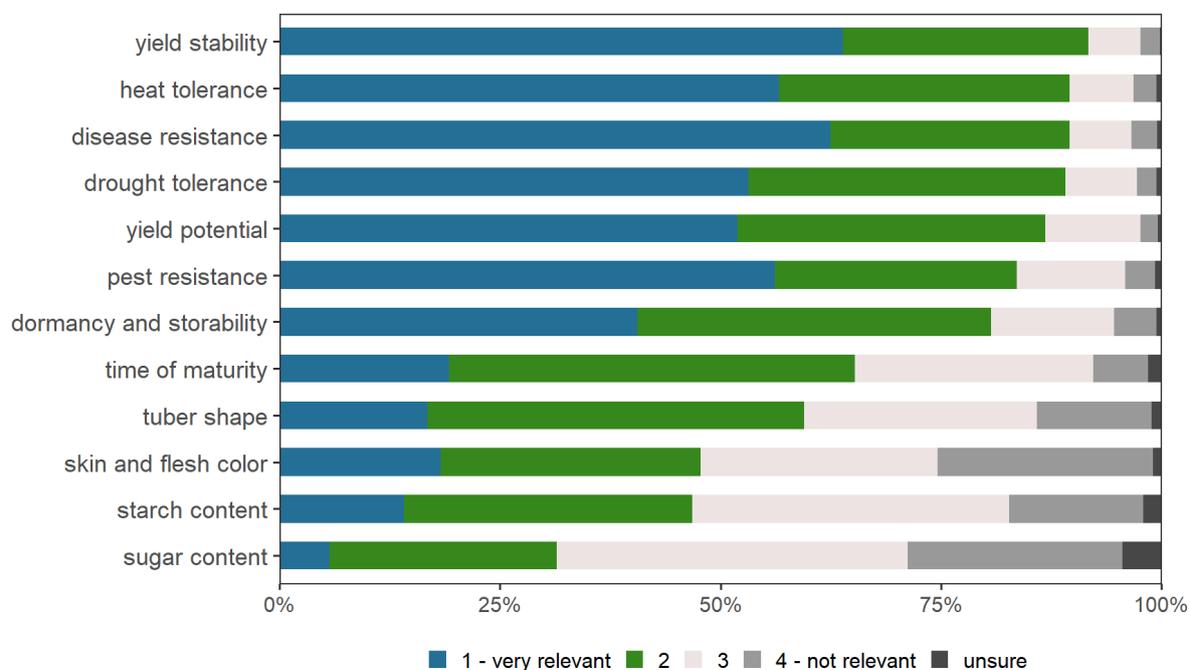
Q7: Which source of information do you use in your choice of variety? (Multiple choice)

N=553	n	%
personal experience	449	81.2
discussion with colleagues	317	57.3
breeding companies	211	38.2
plant variety examination offices	185	33.5
technical associations or institutes	177	32.0
processors	169	30.6
retailers	157	28.4
farmers' representatives / associations	116	21.0
agricultural fairs	85	15.4
others	42	7.6



Q8 (optional): How important do you consider these characteristics for the choice of an adapted variety?

data in %	n	1 - very relevant	2	3	4 - not relevant	unsure
yield potential	545	51.9	34.9	10.8	2.0	0.4
yield stability	543	63.9	27.8	5.9	2.2	0.2
skin and flesh color	524	18.3	29.4	26.9	24.4	1.0
tuber shape	531	16.8	42.7	26.4	13.0	1.1
time of maturity	530	19.2	46.0	27.0	6.2	1.5
disease resistance	546	62.5	27.1	7.0	2.9	0.5
pest resistance	536	56.2	27.4	12.3	3.4	0.7
starch content	526	14.1	32.7	35.9	15.2	2.1
sugar content	505	5.7	25.7	39.8	24.4	4.4
dormancy and storability	539	40.6	40.1	13.9	4.8	0.6
drought tolerance	541	53.2	35.9	8.1	2.2	0.6
heat tolerance	543	56.7	33.0	7.2	2.6	0.6

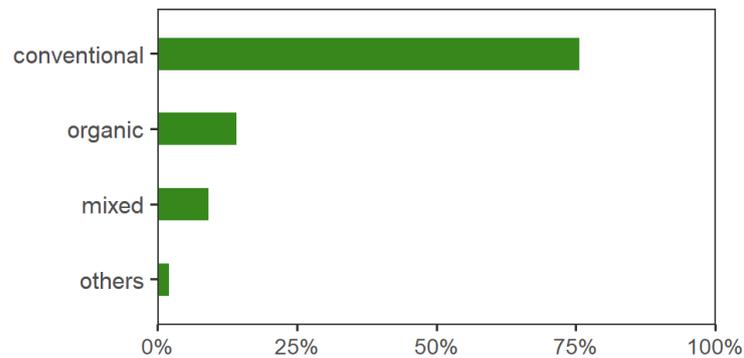


Variables are sorted by number of answers of value 1 plus 2 (green bar).

Set 3: Information about site conditions and survey participants

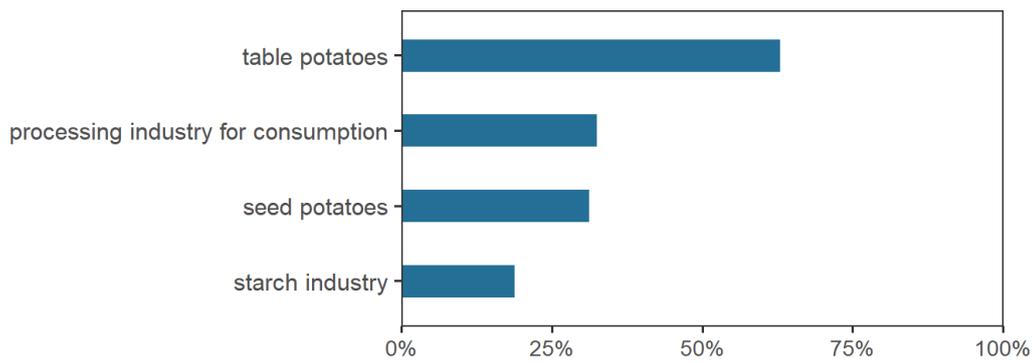
Q9: Which farming system applies to your potato production?

	n	%
conventional	417	75.4
organic	77	13.9
mixed	49	8.9
others	10	1.8
total	553	100.0



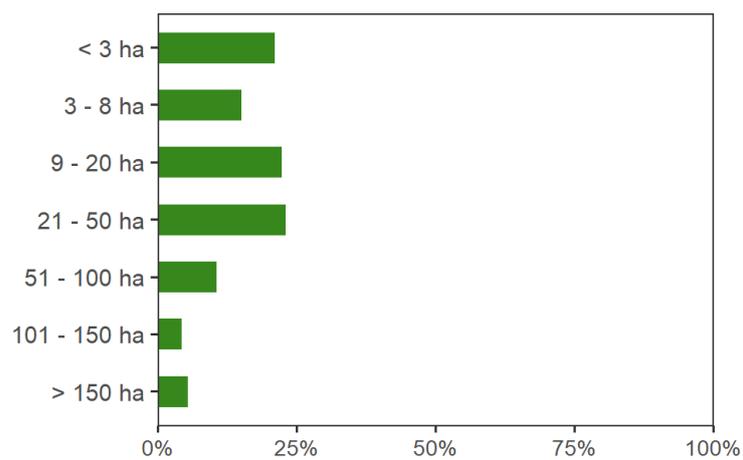
Q10: Your main production target(s). (Multiple choice)

N=553	n	%
table potatoes	347	62.7
processing industry for consumption	178	32.2
seed potatoes	171	30.9
starch industry	103	18.6



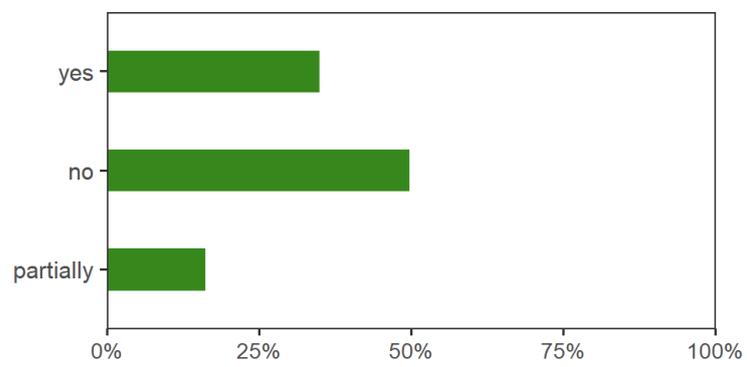
Q11: Potato acreage

	n	%
< 3 ha	115	20.8
3 - 8 ha	82	14.8
9 - 20 ha	122	22.1
21 - 50 ha	126	22.8
51 - 100 ha	57	10.3
101 - 150 ha	22	4.0
> 150 ha	29	5.2
total	553	100.0



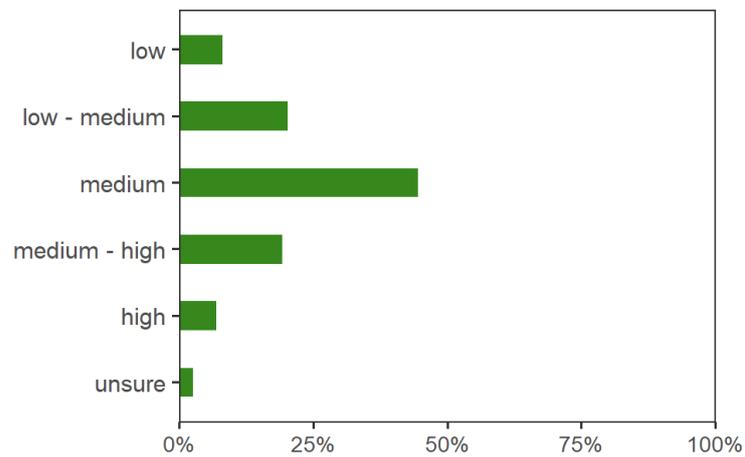
Q12: Possibility of irrigation

	n	%
yes	192	34.7
no	273	49.4
partially	88	15.9
total	553	100.0



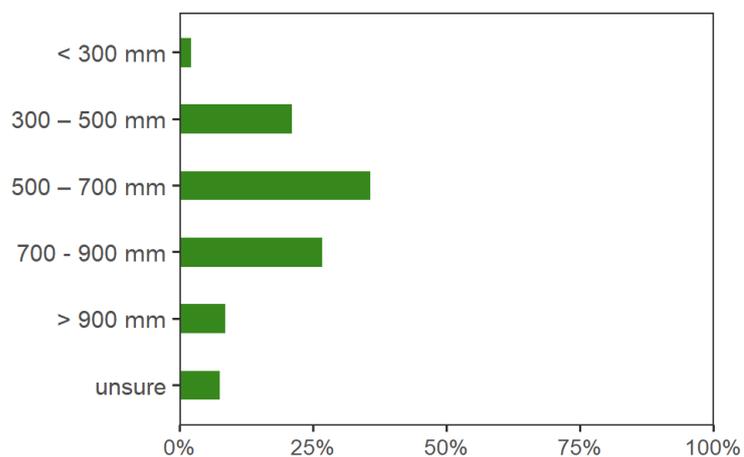
Q13: Soil water retention capacity

	n	%
low	43	7.8
low - medium	110	19.9
medium	245	44.3
medium - high	105	19.0
high	37	6.7
unsure	13	2.4
total	553	100.0



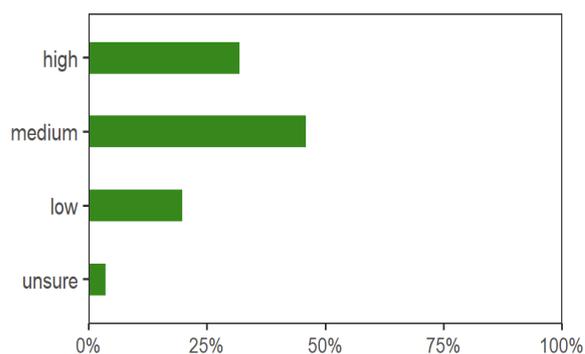
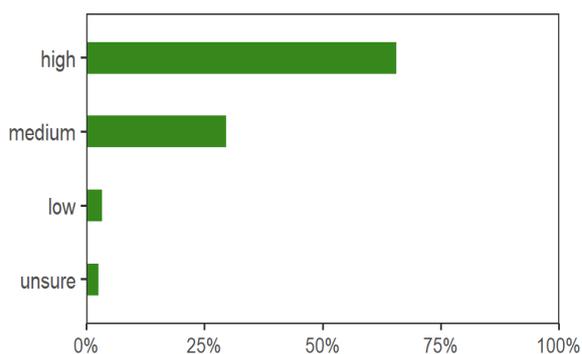
Q14: Medium annual precipitation

	n	%
< 300 mm	10	1.8
300 – 500 mm	115	20.8
500 – 700 mm	196	35.4
700 - 900 mm	146	26.4
> 900 mm	46	8.3
unsure	40	7.2
total	553	100.0



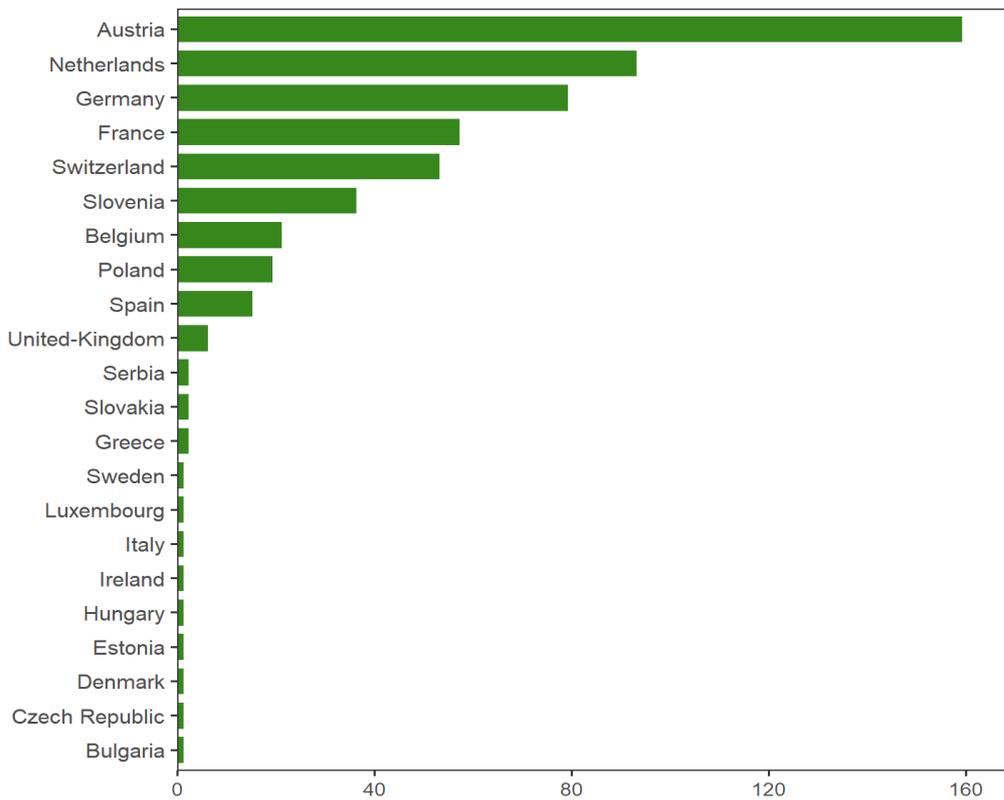
Q15 & Q16: Probability of maximum temperature >26 °C for more than 7 days during growing period (left). Probability of maximum temperature >30°C for more than 7 days during growing period (right).

	n > 26°C	% > 26°C	n > 30°C	% > 30°C
high	361	65.3	175	31.6
medium	162	29.3	252	45.6
low	17	3.1	108	19.5
unsure	13	2.4	18	3.3
total	553	100.0	553	100.0



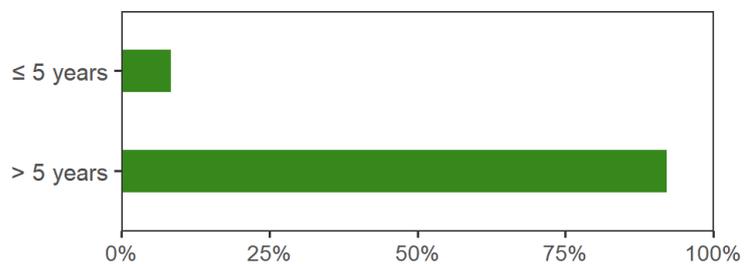
Q17: Where is your potato production located?

	n	%
Austria	159	28.75
Netherlands	93	16.82
Germany	79	14.29
France	57	10.31
Switzerland	53	9.58
Slovenia	36	6.51
Belgium	21	3.80
Poland	19	3.44
Spain	15	2.71
United-Kingdom	6	1.08
Serbia	2	0.36
Slovakia	2	0.36
Greece	2	0.36
Sweden	1	0.18
Luxembourg	1	0.18
Italy	1	0.18
Ireland	1	0.18
Hungary	1	0.18
Estonia	1	0.18
Denmark	1	0.18
Czech Republic	1	0.18
Bulgaria	1	0.18
total	553	100.0



Q18: How long have you been growing potato?

	n	%
≤ 5 years	45	8.1
> 5 years	508	91.9
total	553	100.0



Q19: What is your age?

	n	%
≤ 24 years	7	1.3

	n	%
25 - 34 years	75	13.6
35 - 44 years	118	21.3
45 - 54 years	159	28.8
55 - 64 years	167	30.2
≥ 65 years	27	4.9
total	553	100.0

