

Target the right people with fertilizer education: who influences decision makers?

Results from producer and dealer surveys

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Reason for survey

Producers do not widely trust University/Extension fertilizer recommendations; therefore, they are not always implemented throughout the state.



PRODUCER SURVEY



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Goals of producer survey

1. Identify key **decision makers** and **decision influencers** in fertilizer management
2. Attempt to understand why University recommendations are not implemented **more**

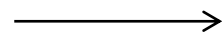
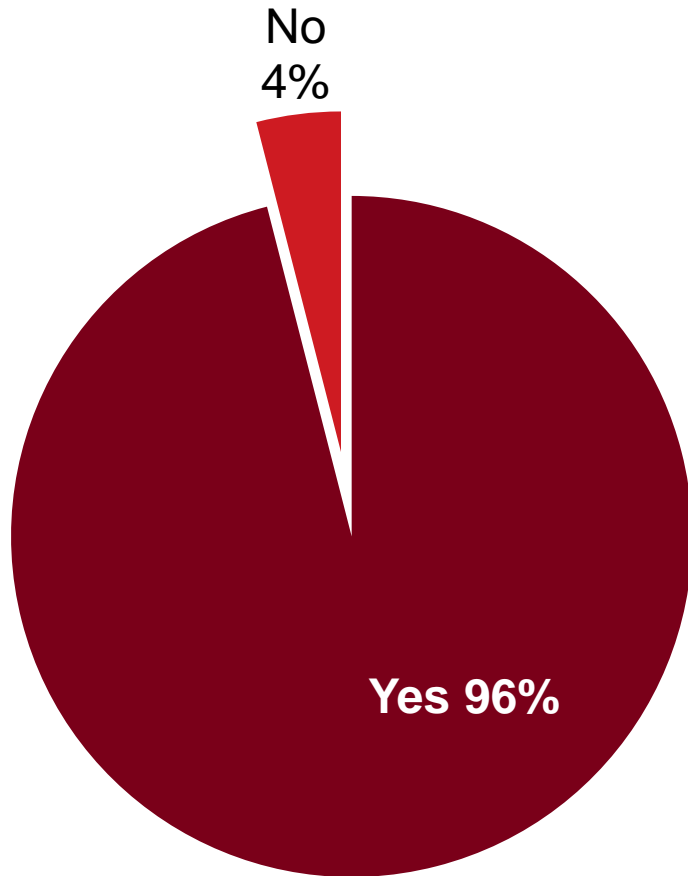


Survey details

- Hard copy survey
- Mailed to 500 producers (MN Corn Grower Assn. members)
- Sent August 17, 2012; reminder postcard sent 10 days later
- Survey re-sent on September 14 to those who had not replied
- Responses mailed to the Minnesota Survey Research Center
- Response rate: 58%



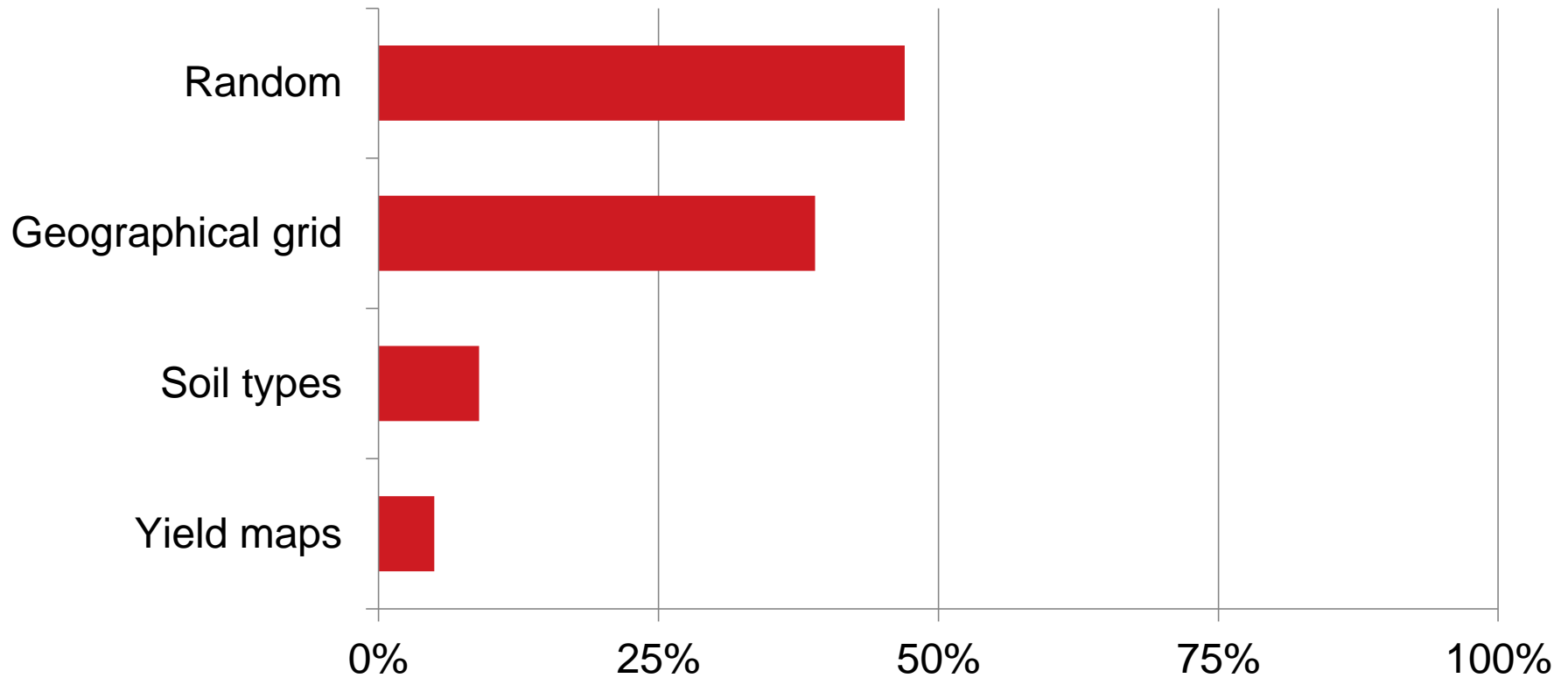
Do you test soil regularly?



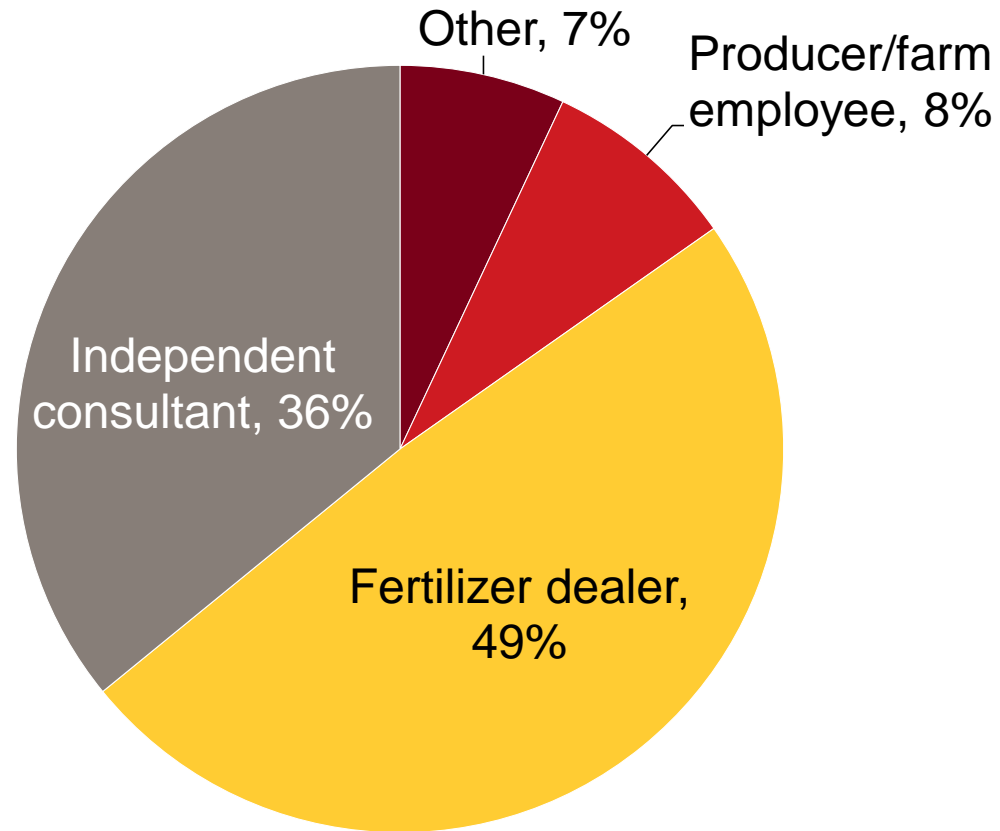
Testing soil about every 2.95 years per field



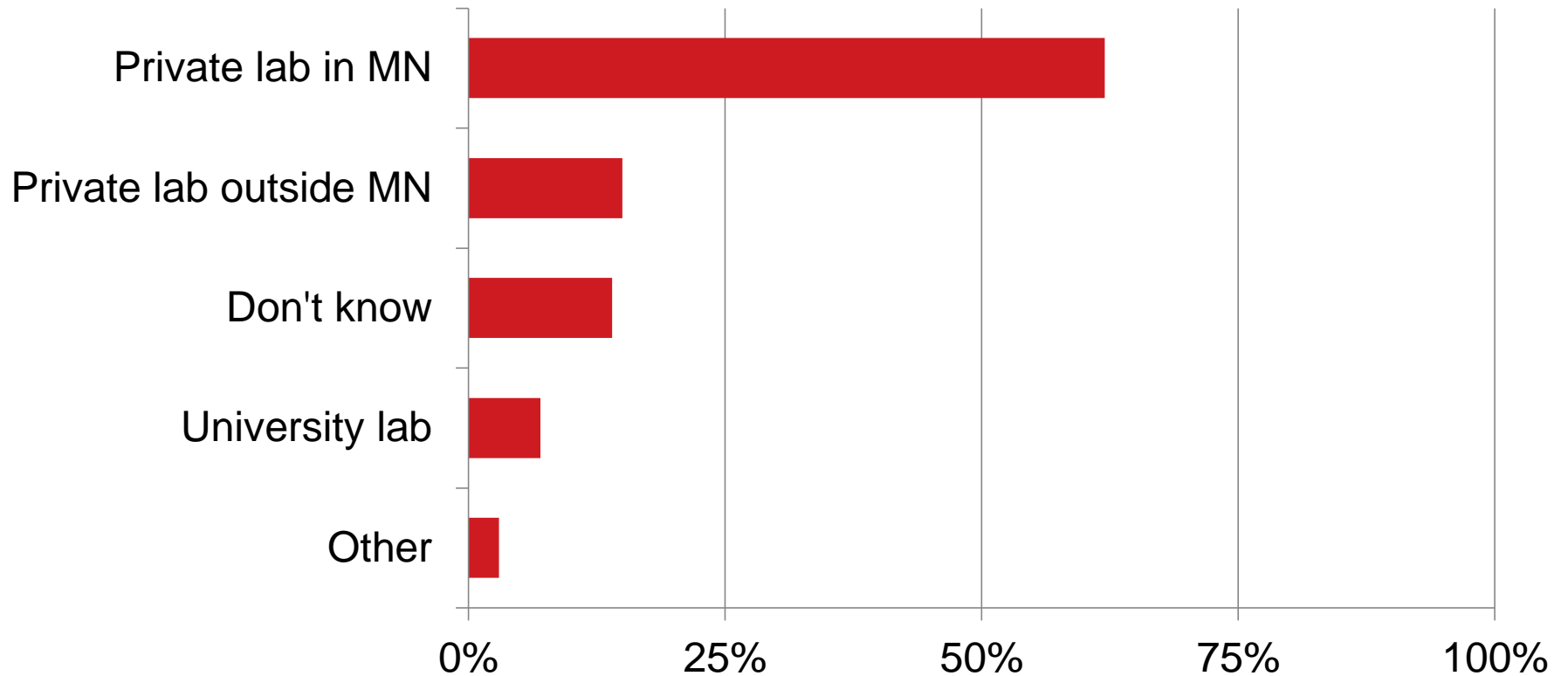
What's your soil sampling system?



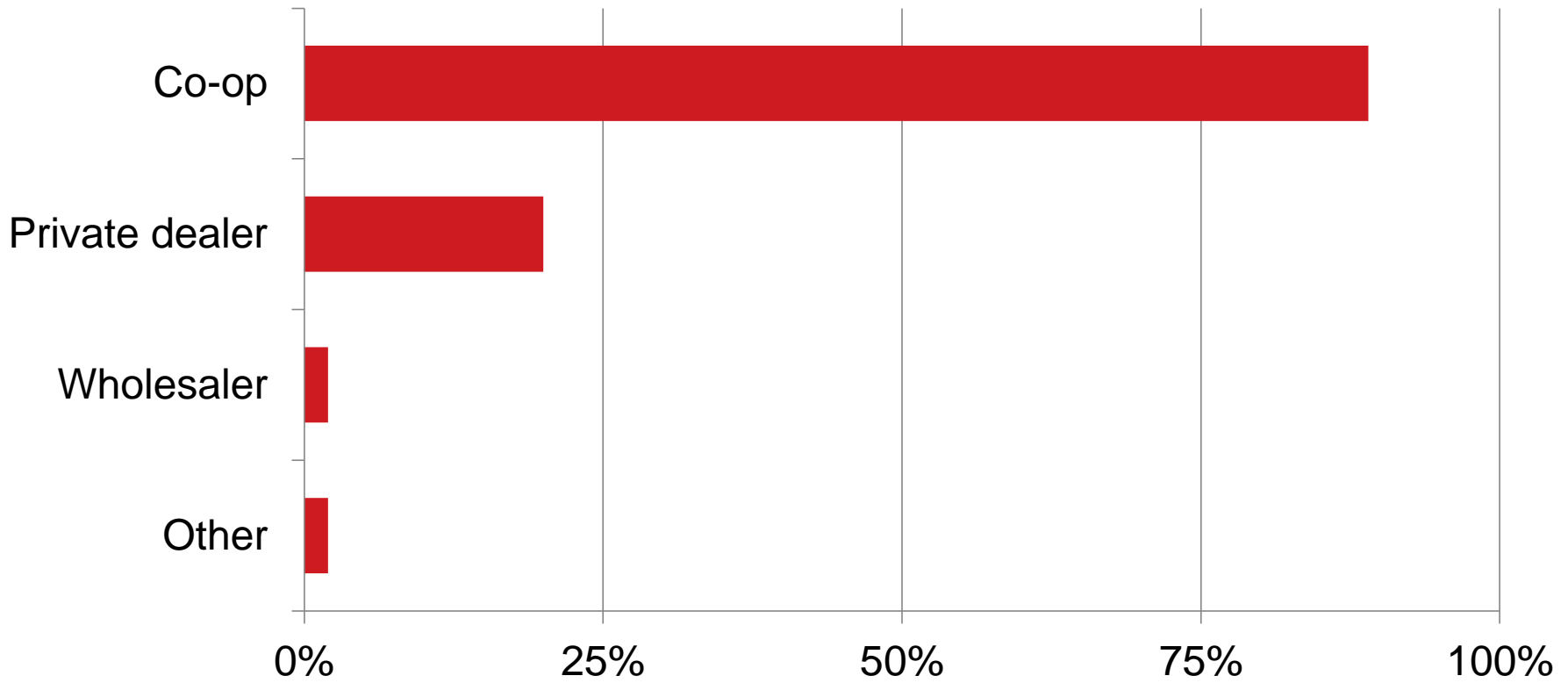
Who collects soil samples?



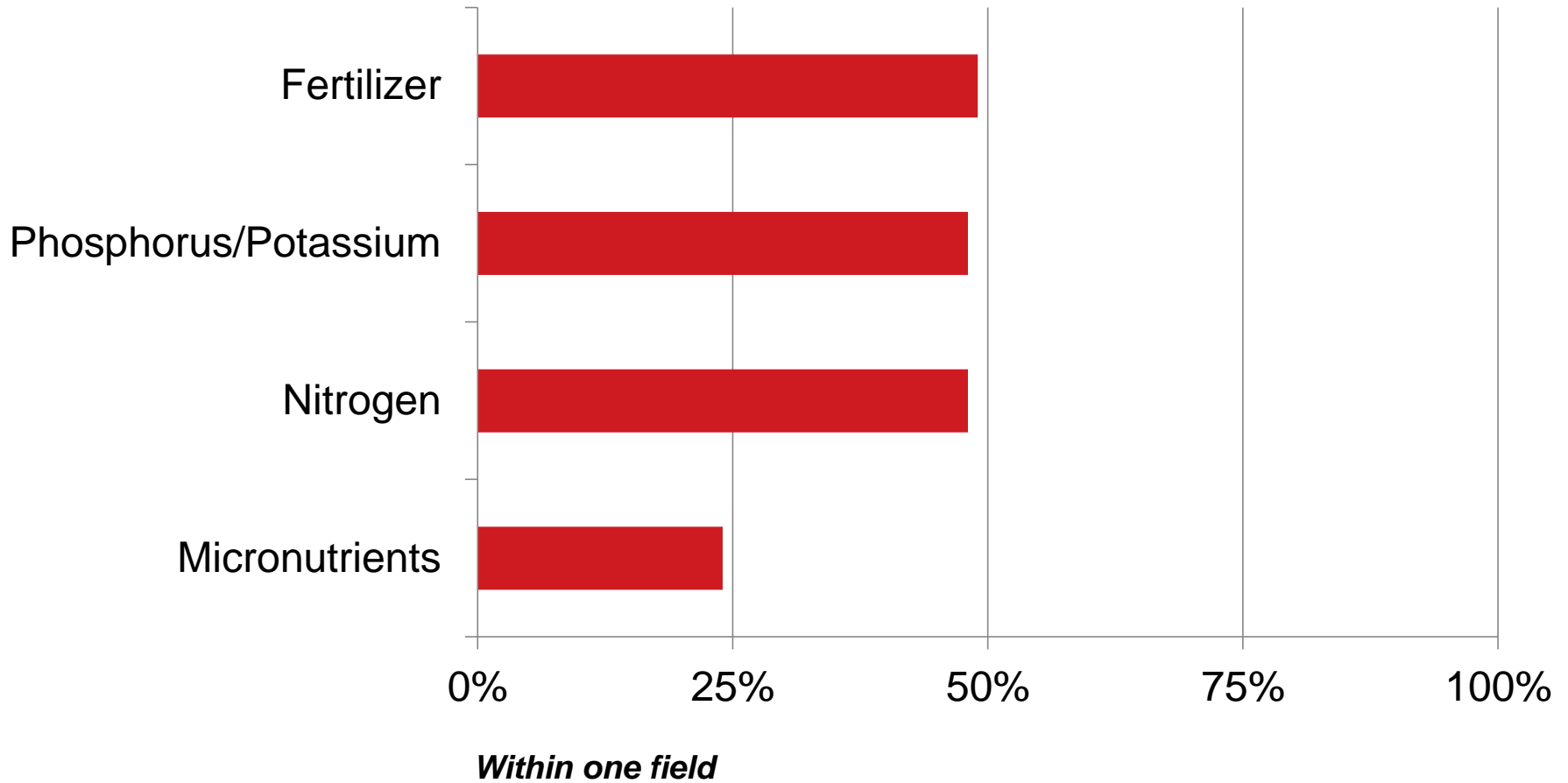
What lab analyzes soil?



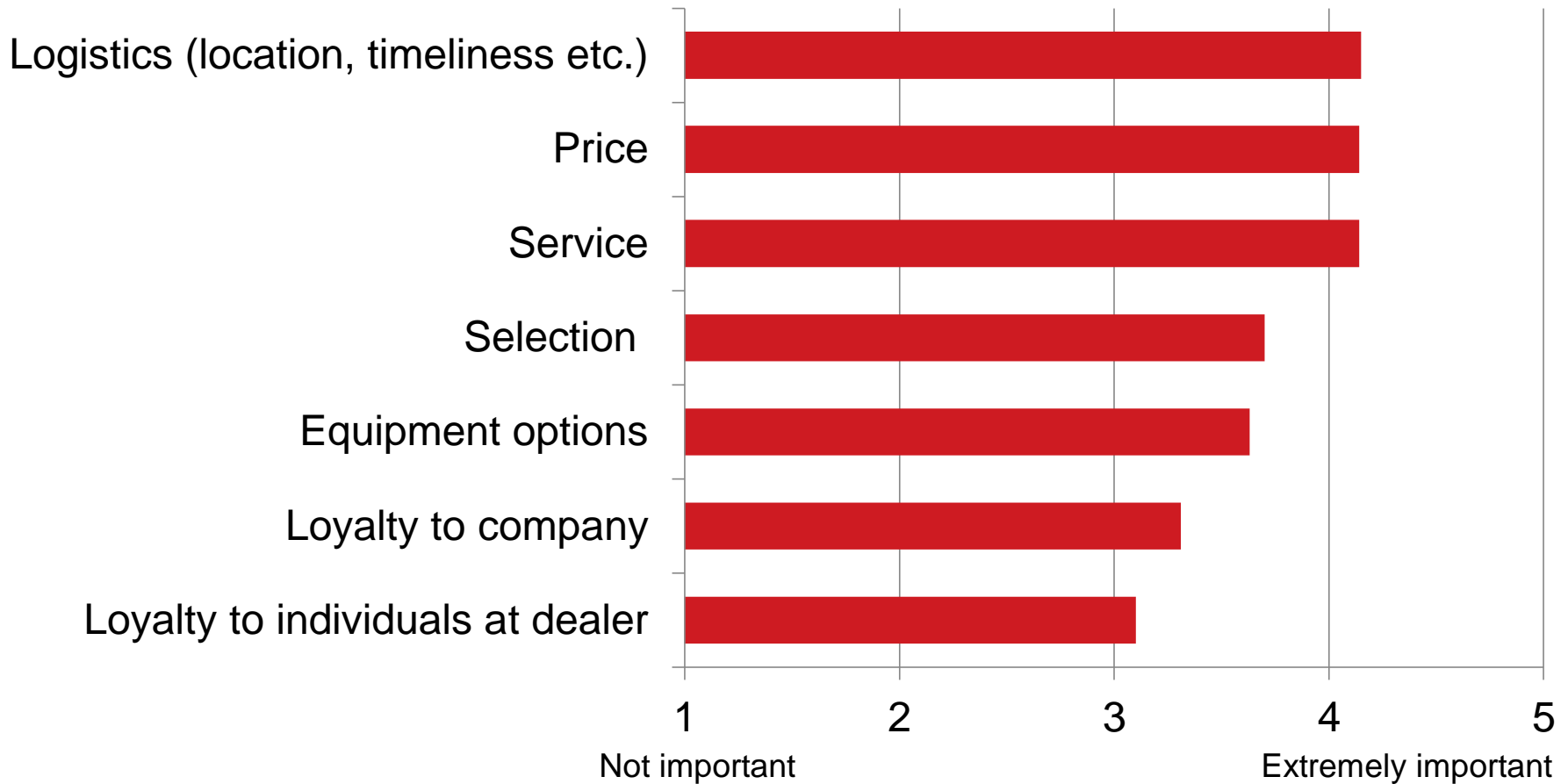
Where do you buy fertilizer?



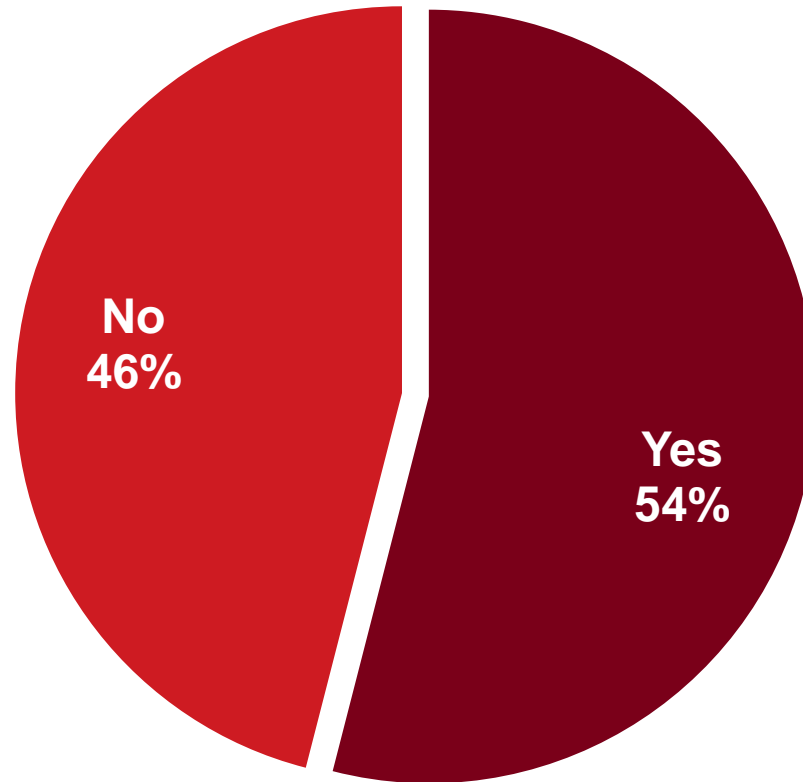
Percent who apply more than one rate of:



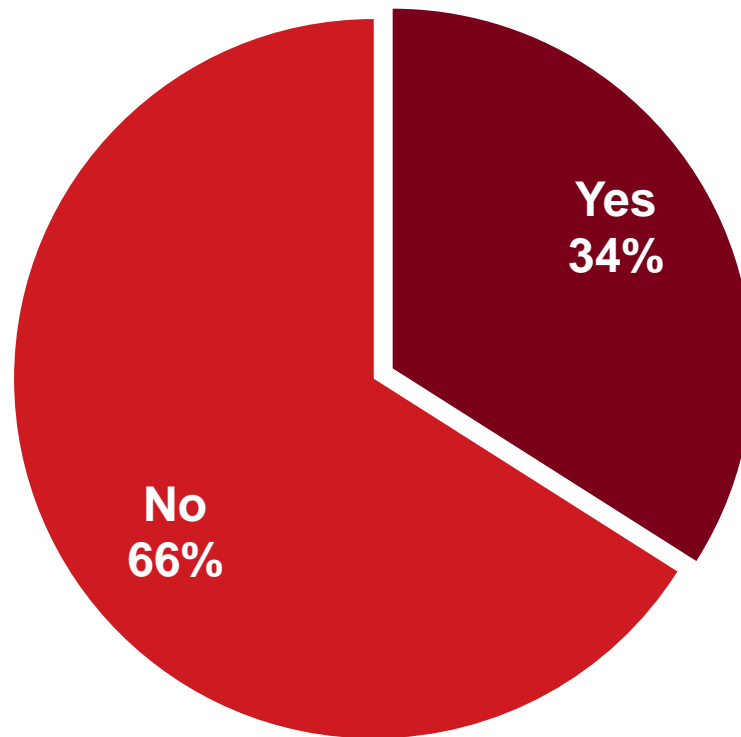
Why purchase from your current dealer?



Does dealer develop your nutrient management plan?



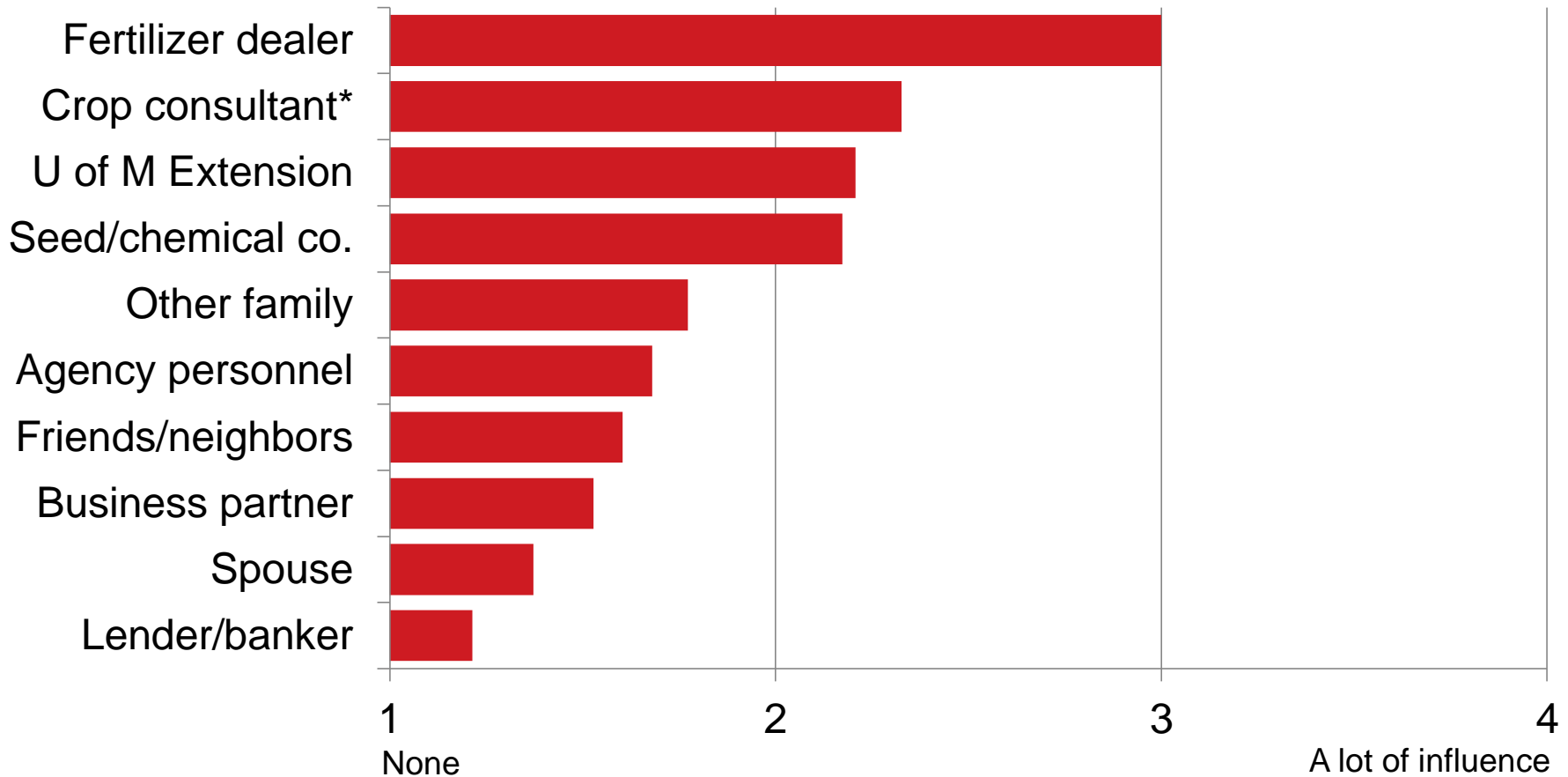
Do you hire a crop consultant* for fertilizer decisions?



*Not associated with fertilizer dealer



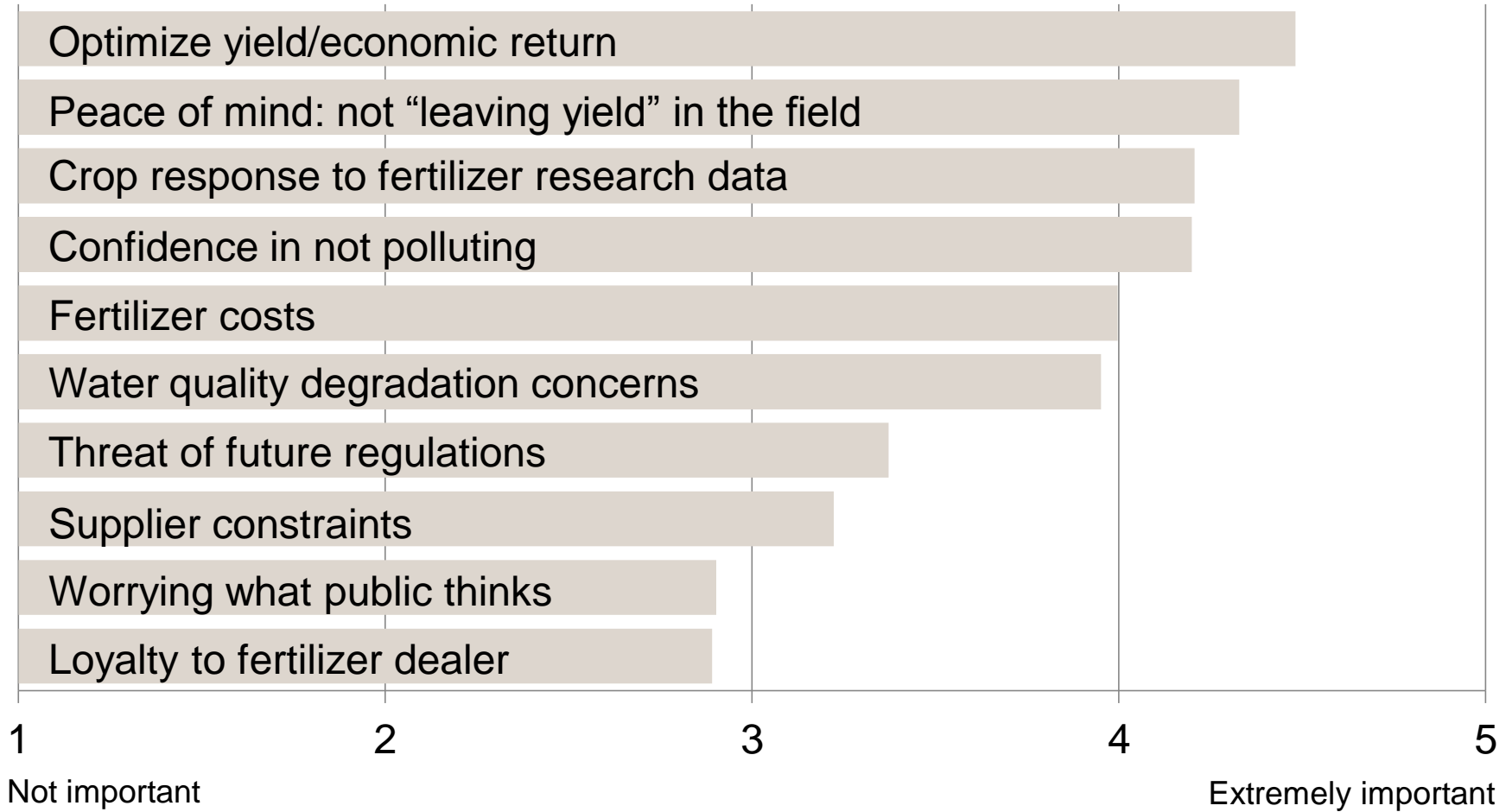
How much do these **people** influence your N fertilizer management?



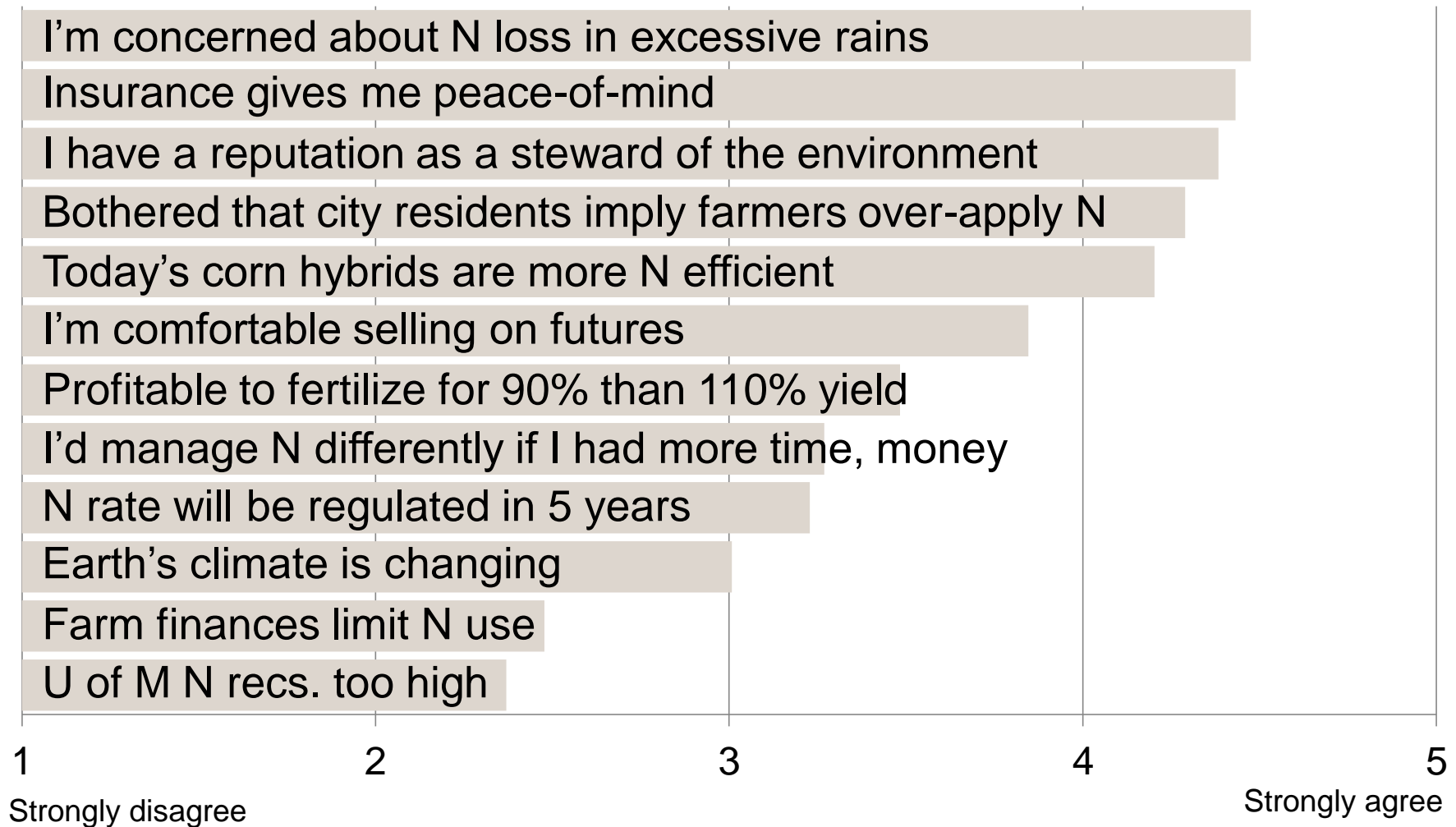
*Not associated with fertilizer dealer



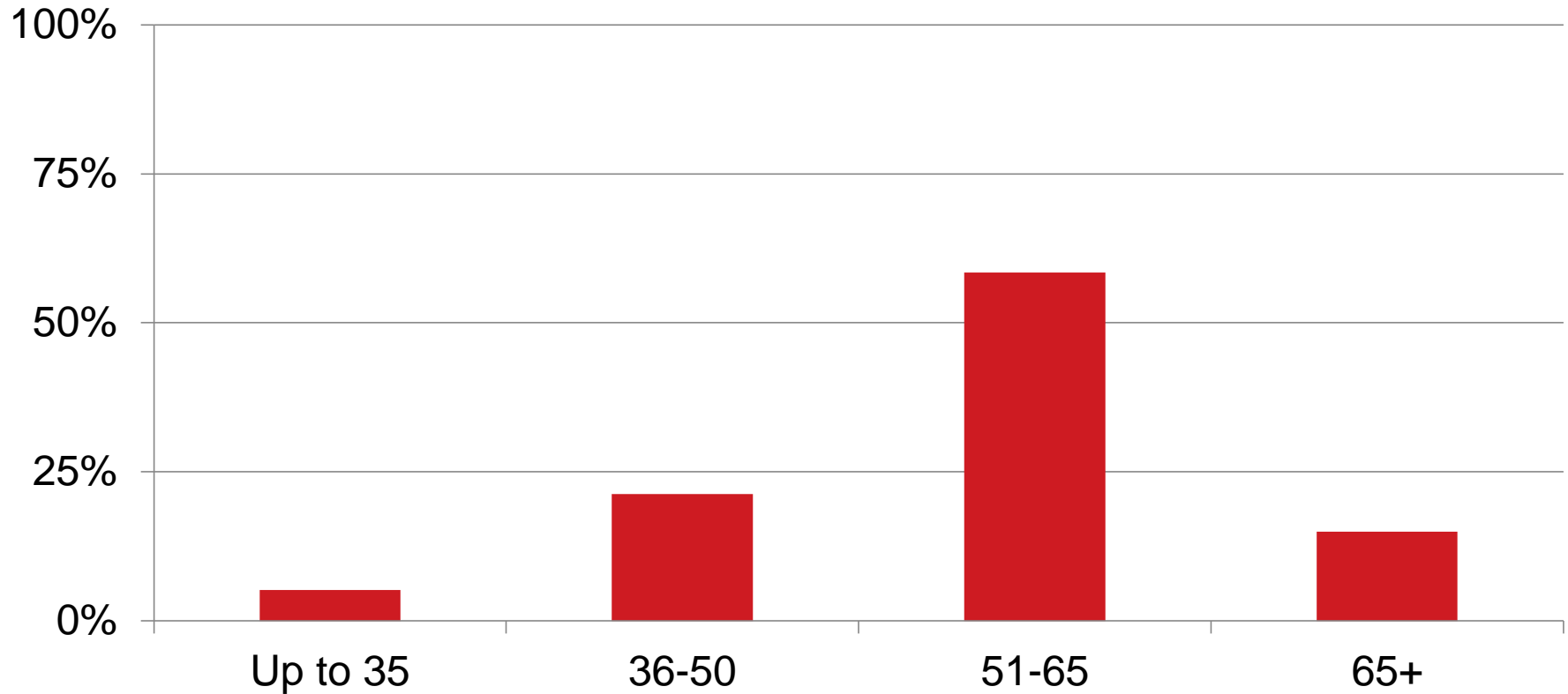
What impacts your N fertilizer management decisions?



How much do you agree with these statements?



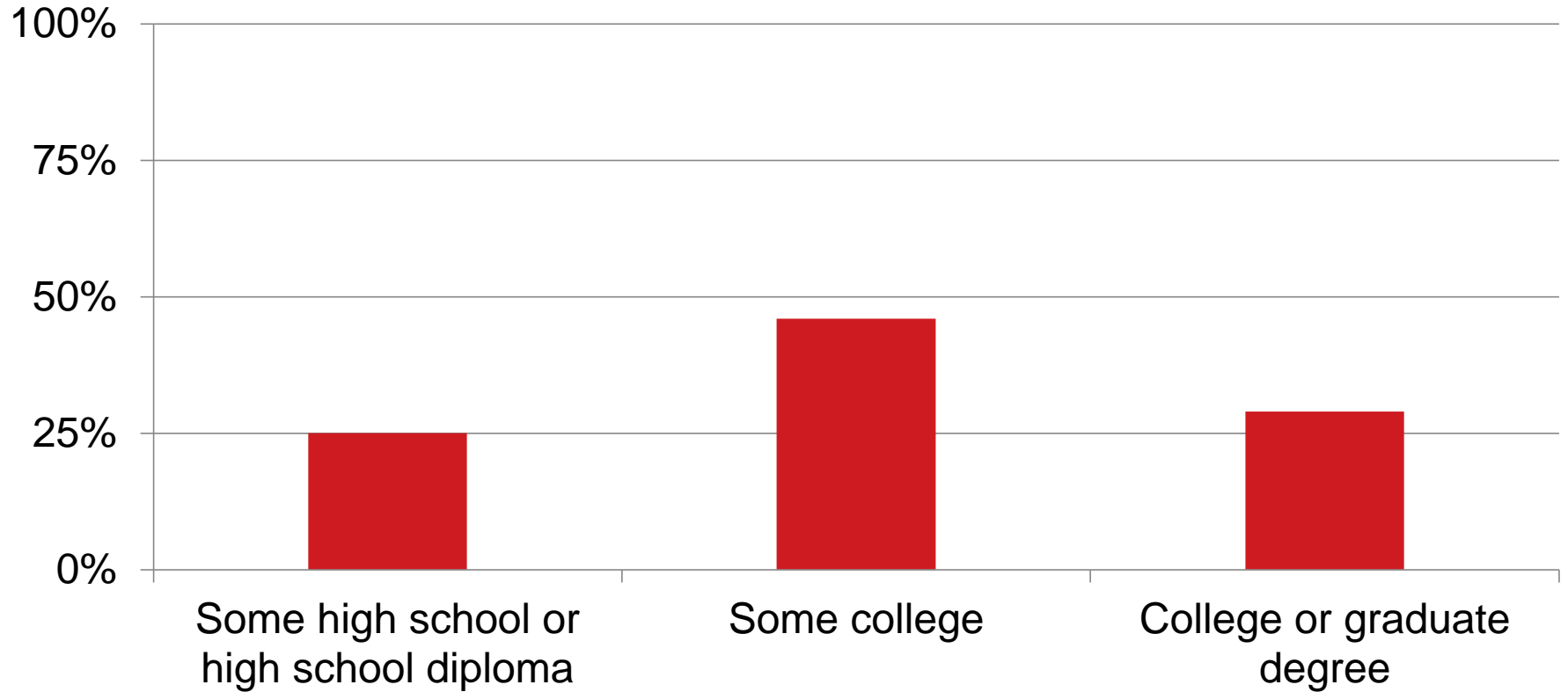
What is your age?



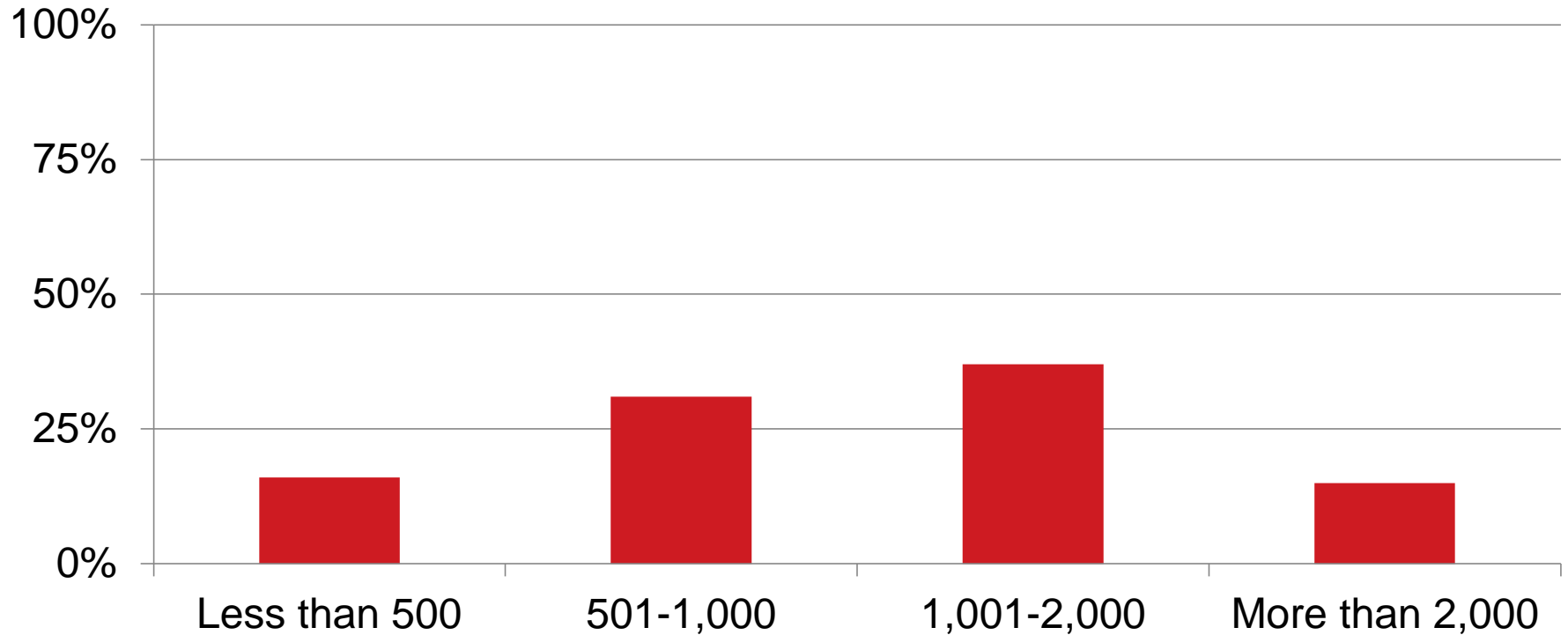
Average age: 55.4 years, range: 22-89 years



What is your highest level of education?



How many acres do you farm?



**Average farm size is 1,414 acres.
86% of acreage is planted in corn or soybean.**



Producer decisions influenced most by:

- Fertilizer dealer personnel
- Crop consultants (when used)



DEALER SURVEY



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Goals of next survey of dealers

1. Identify **how, where,** and **when** decision influencers acquire fertilizer management information
2. Attempt to understand why University recommendations are not implemented **more**

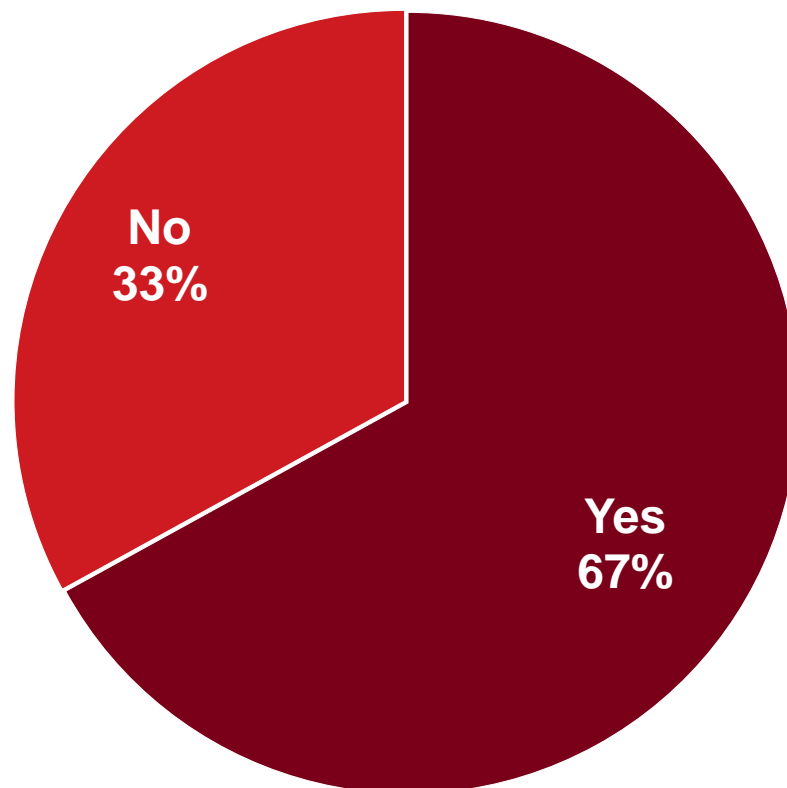


Survey details

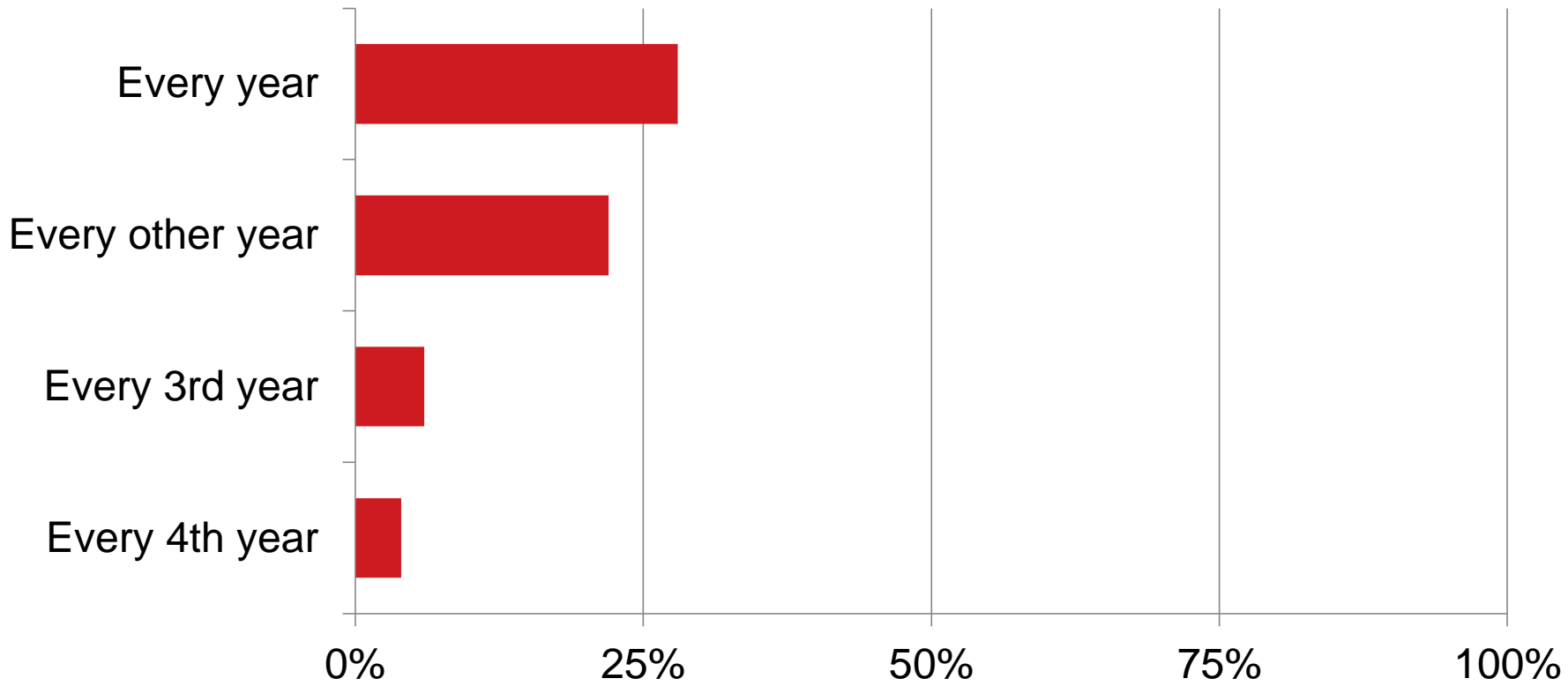
- Partnered with MN Crop Production Retailers
- Surveyed ALL 284 member dealerships
 - Mainly general managers
- Hard copy survey
- Mailed March 5, 2013
- Reminder mailing at one week and three weeks
- Final response rate: 63%



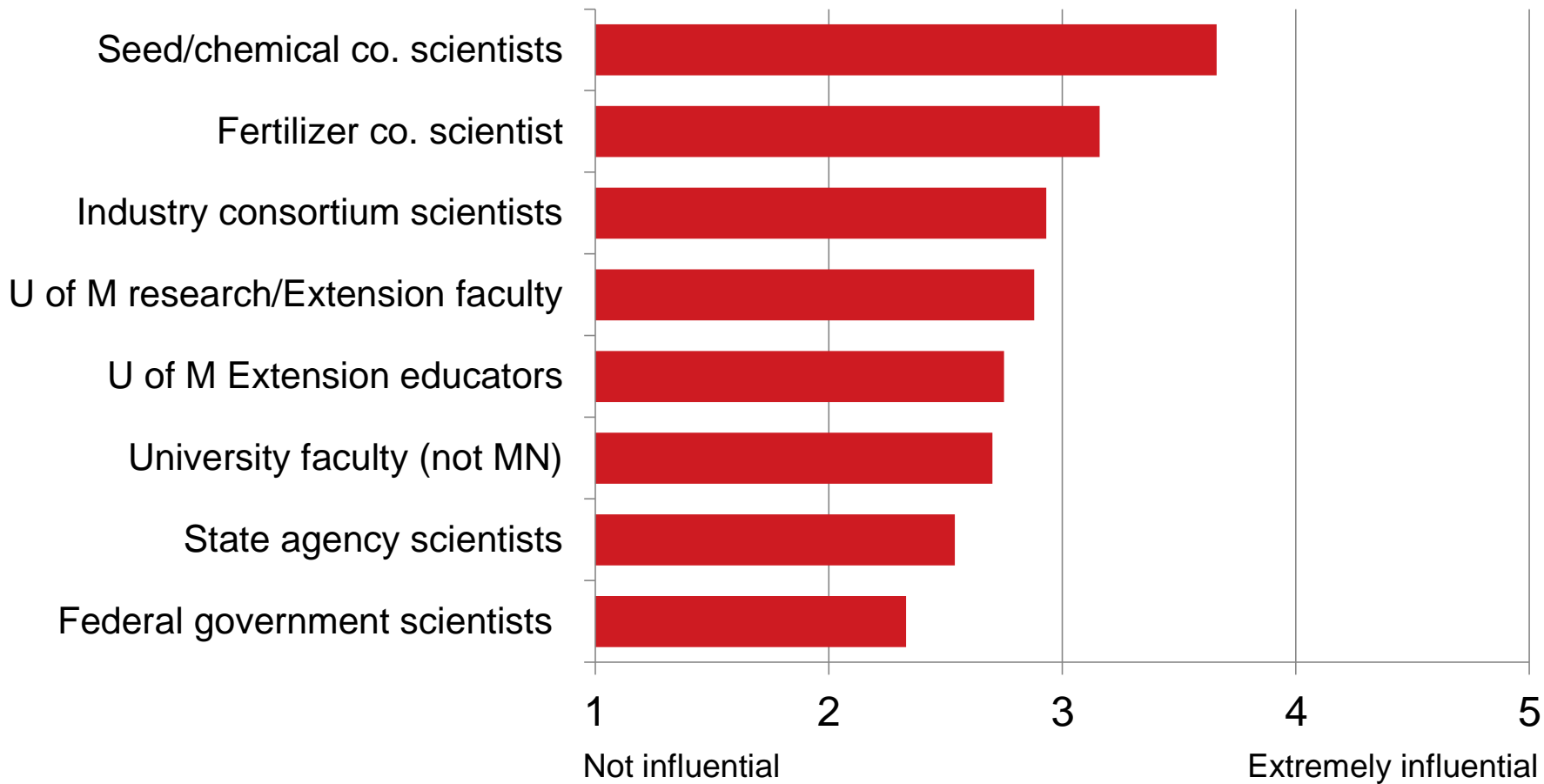
Do you develop nutrient management plans for each customer?



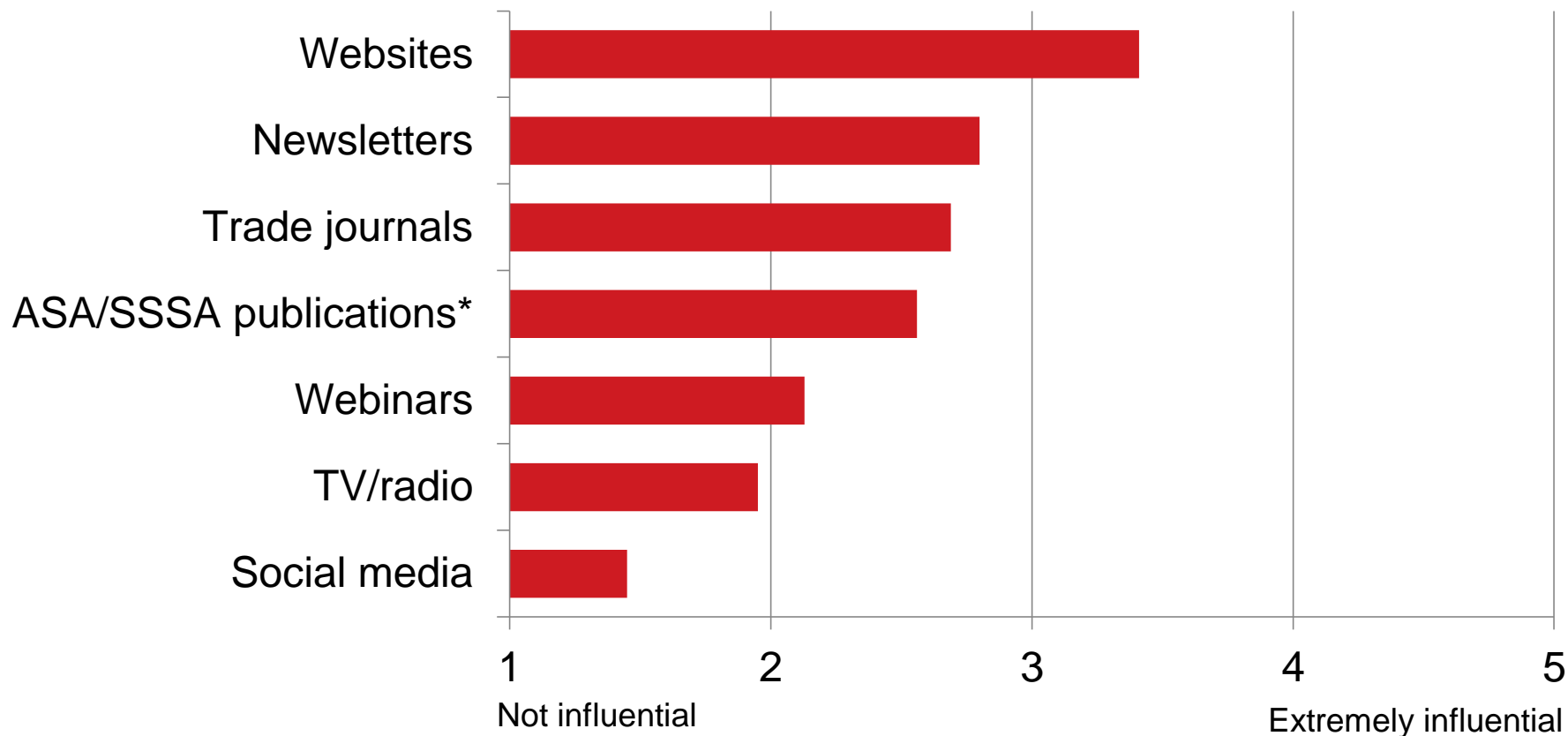
How often do you develop a nutrient management plan for a farm?



How much do these **people** influence your N fertilizer recommendations?



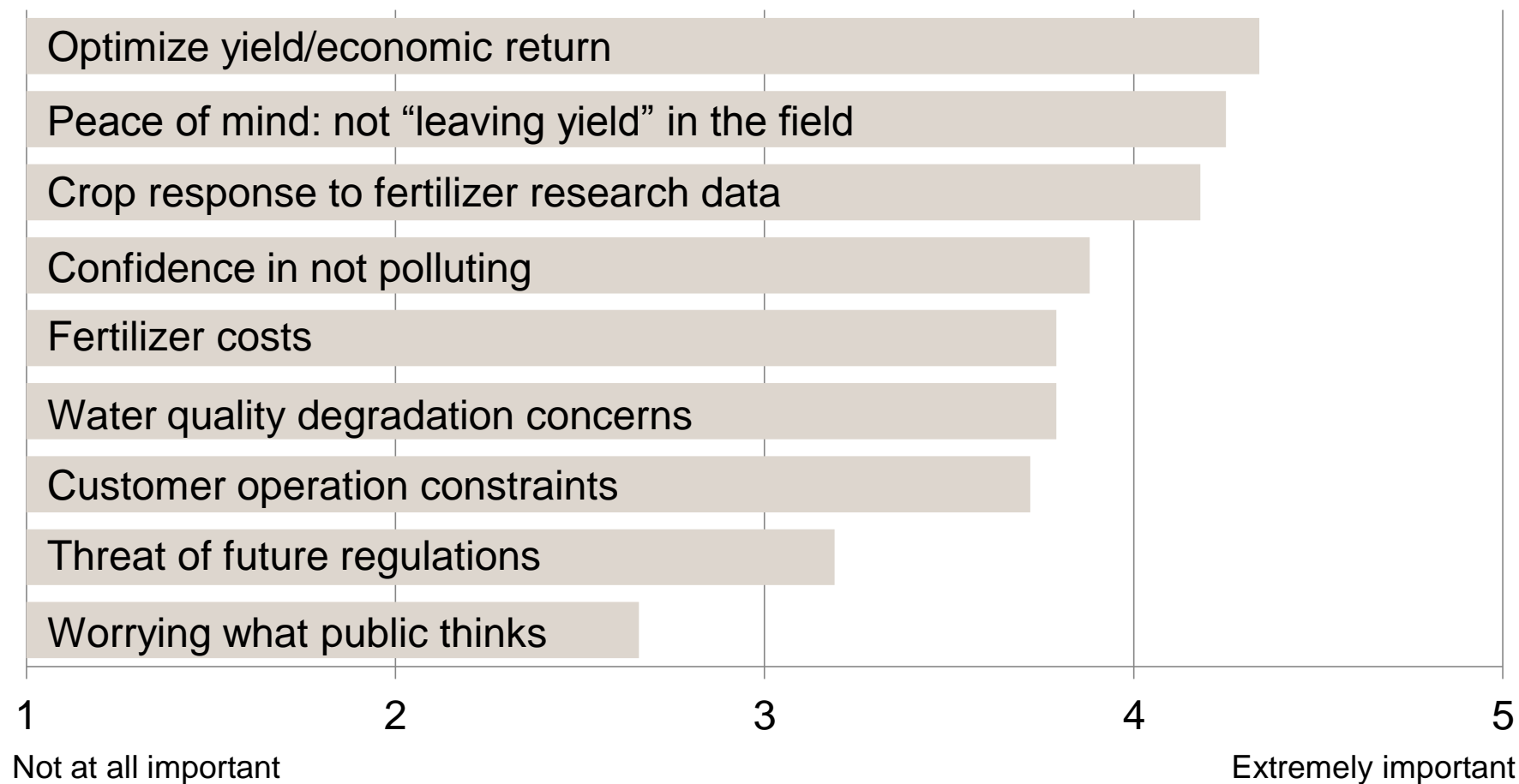
How much do these **resources** influence your N fertilizer recommendations?



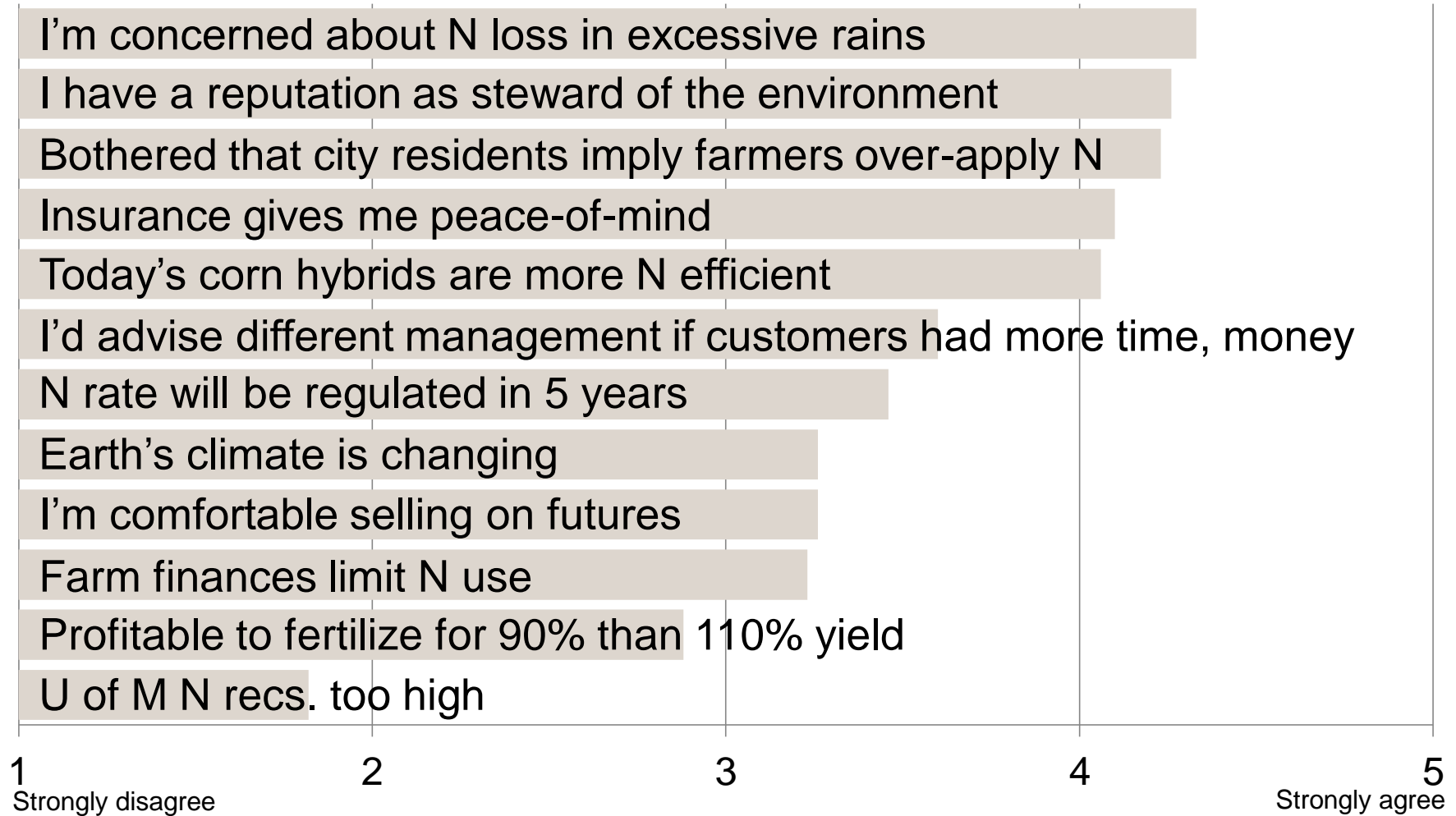
*American Society of Agronomy/Soil Science Society of America



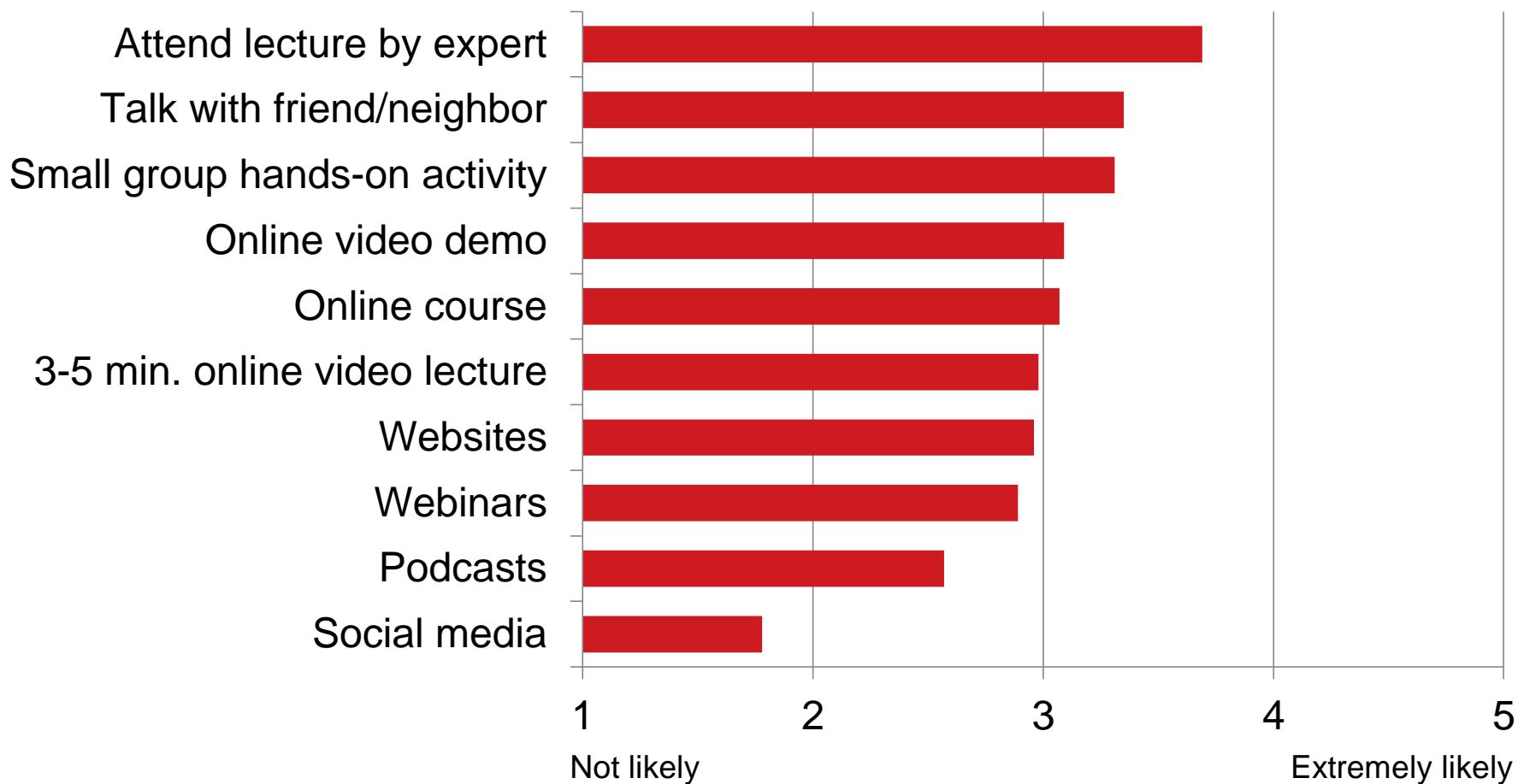
How important are these factors in customer discussions?



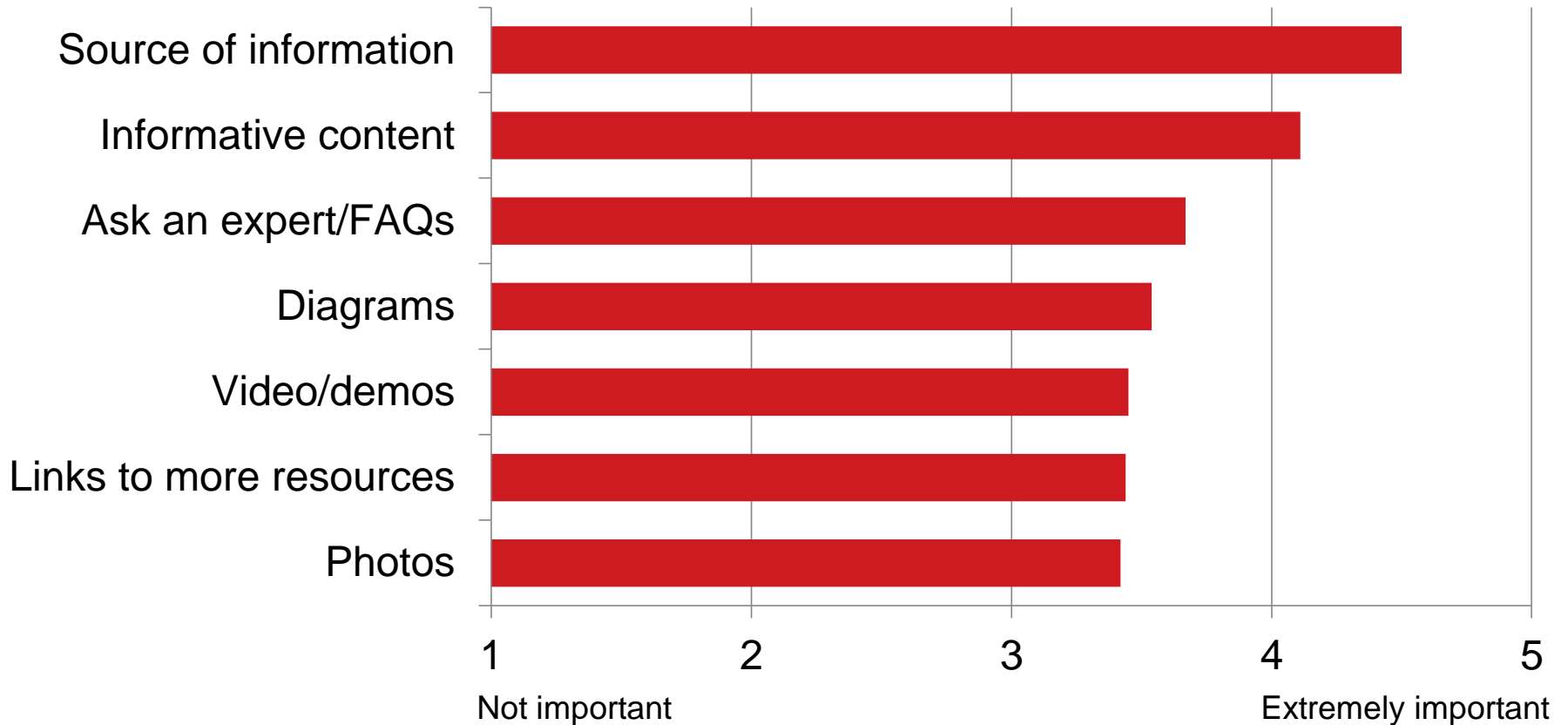
How much do you agree with these statements?



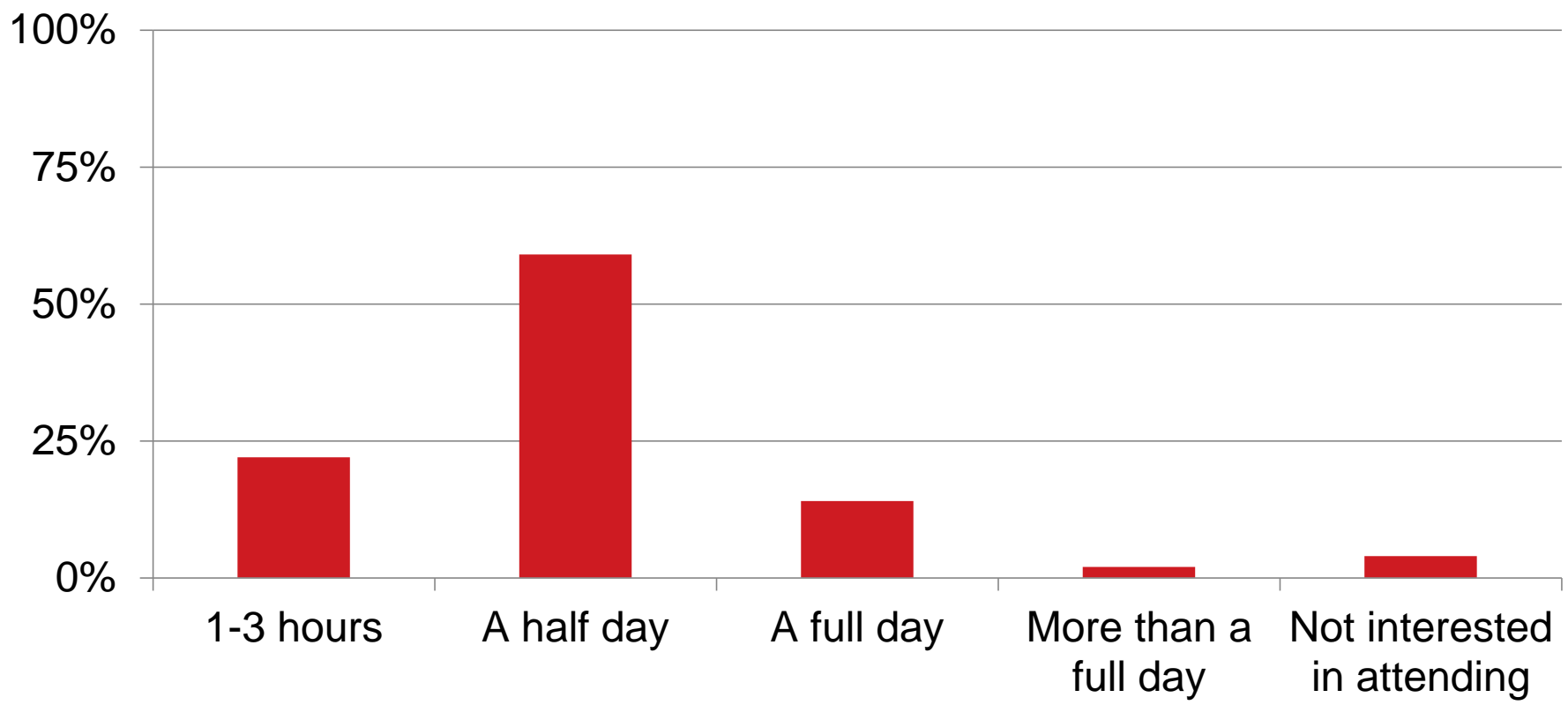
How likely are you to use the following N fertilizer resources?



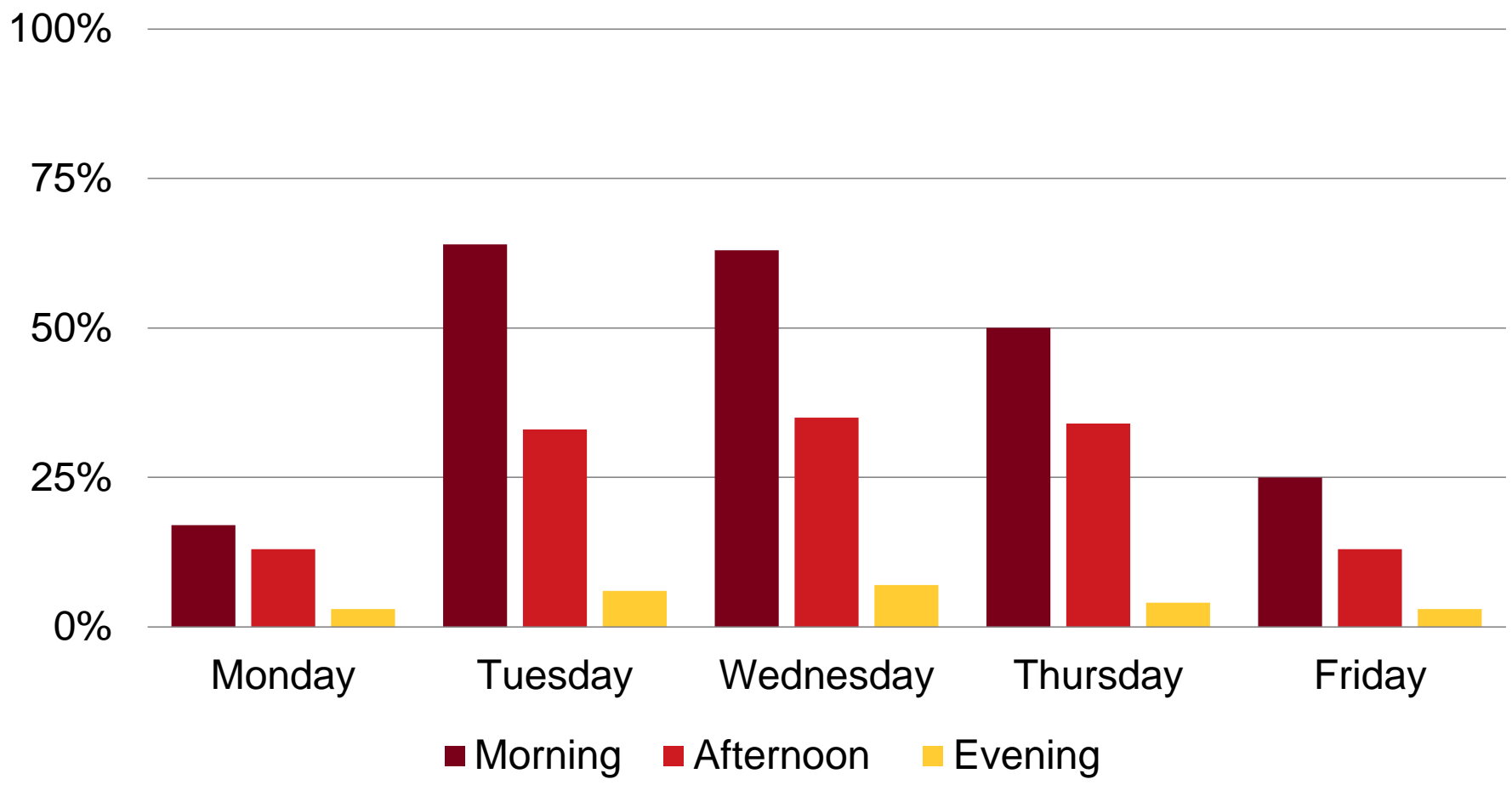
What's important in a website?



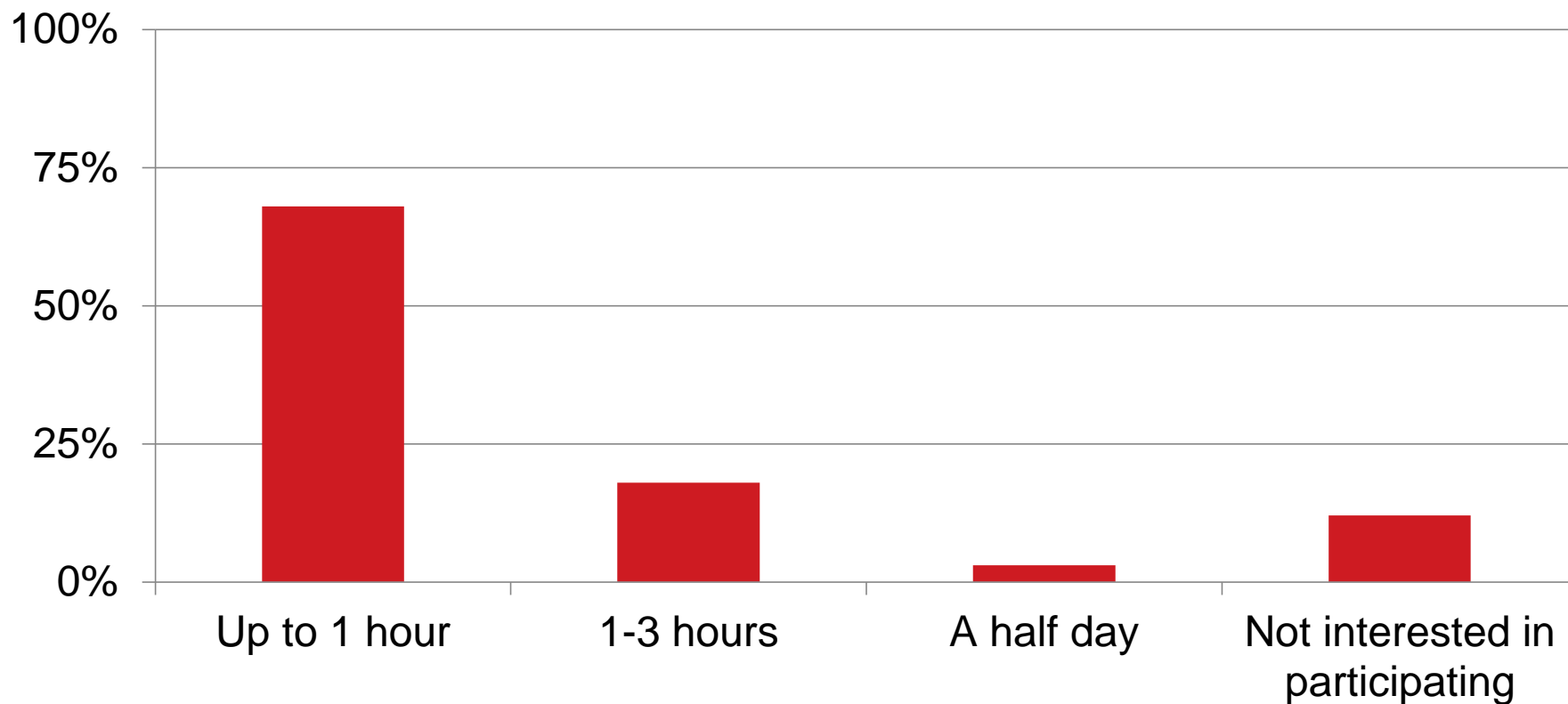
How long should **in-person** fertilizer education be?



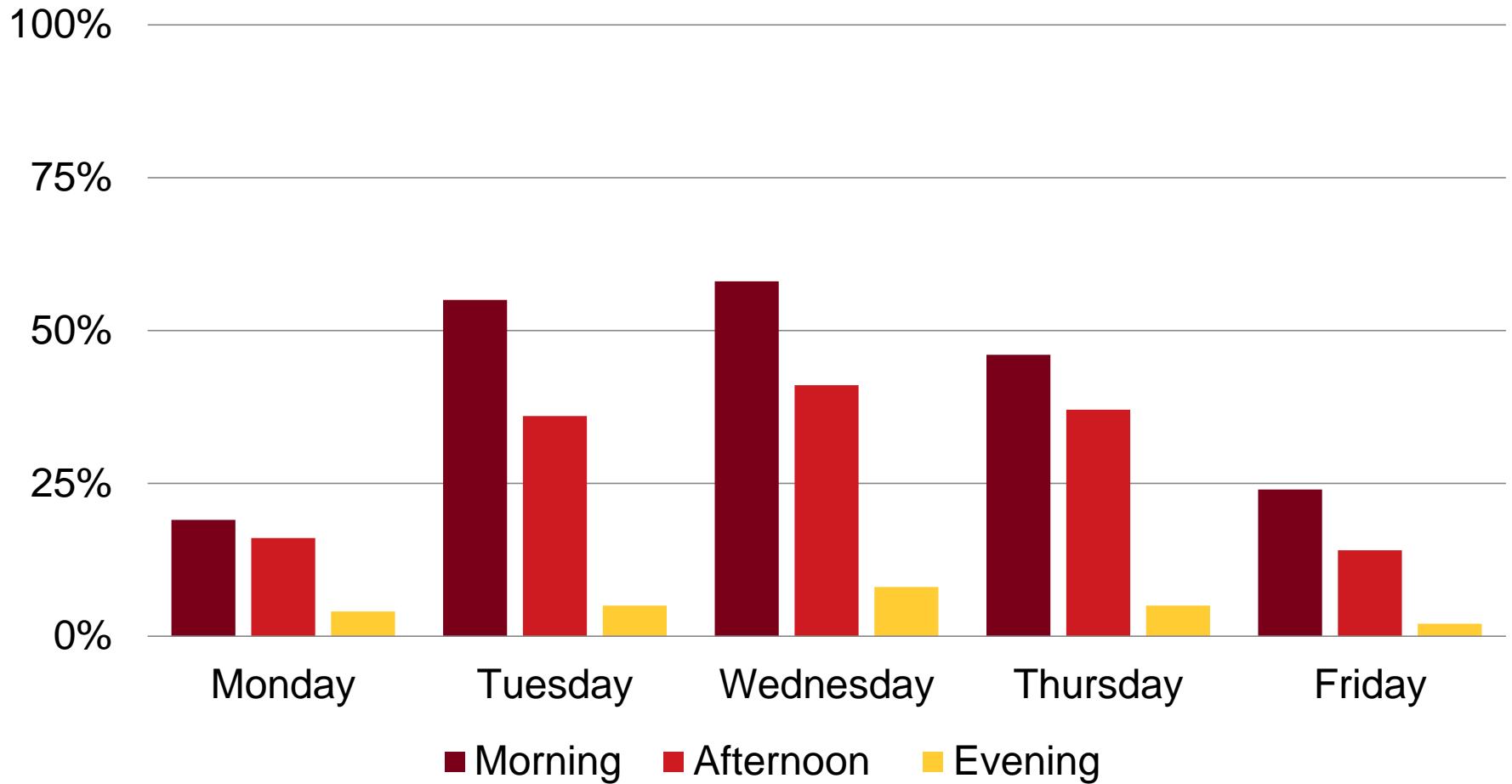
What day/time do you prefer for **in-person** fertilizer education?



How long should **online** fertilizer education be?

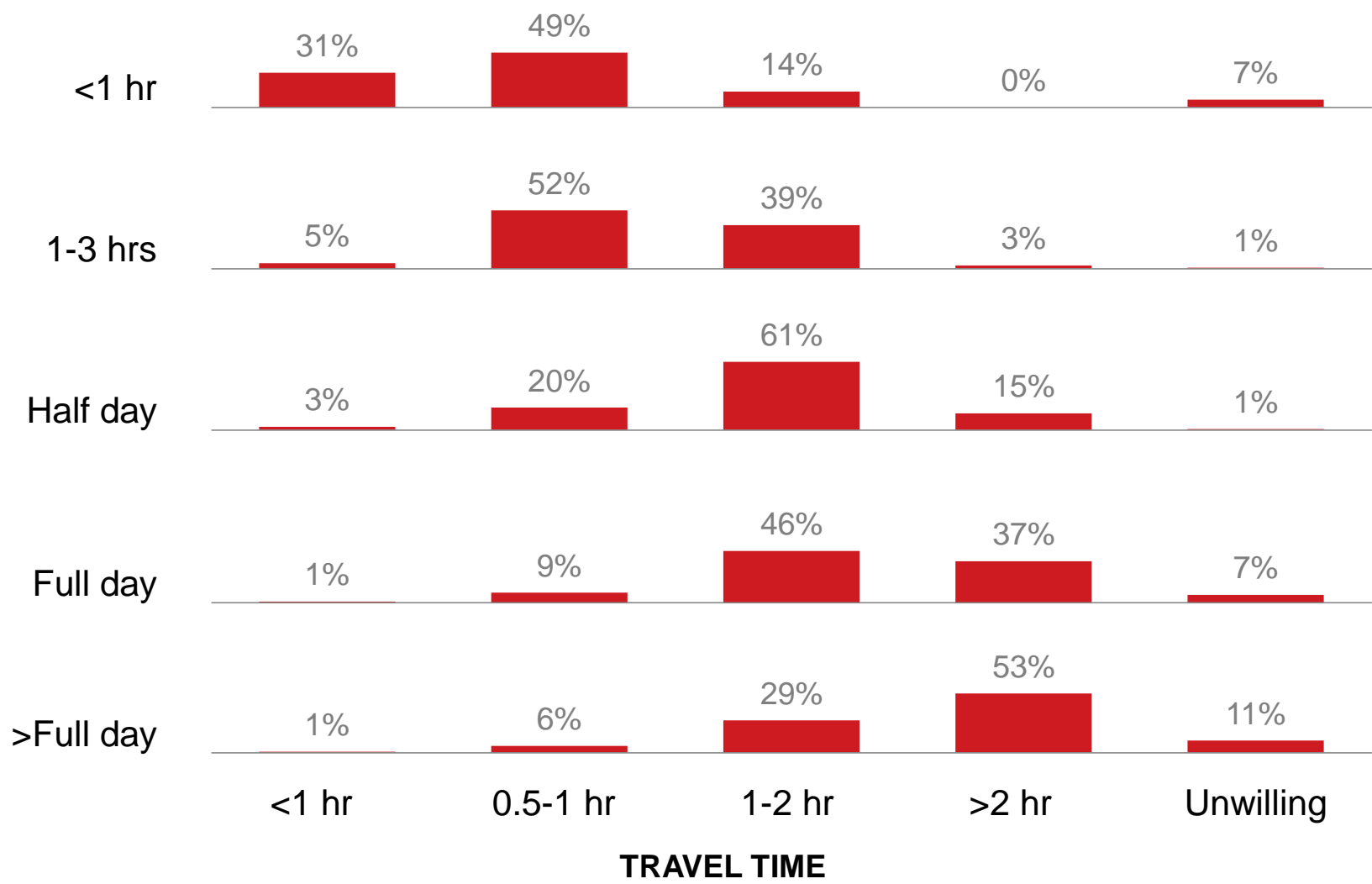


What day/time do you prefer for **online** fertilizer education?

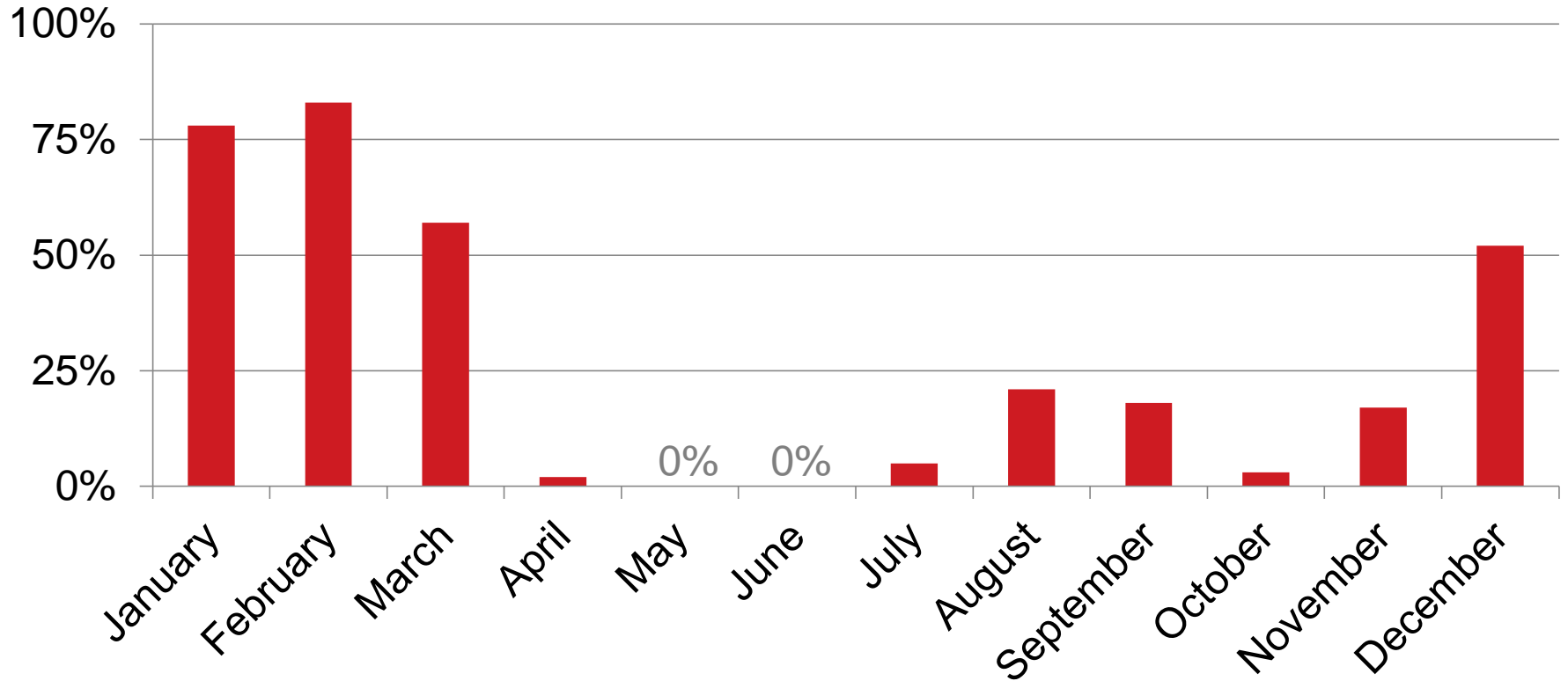


What's the maximum time you would travel?

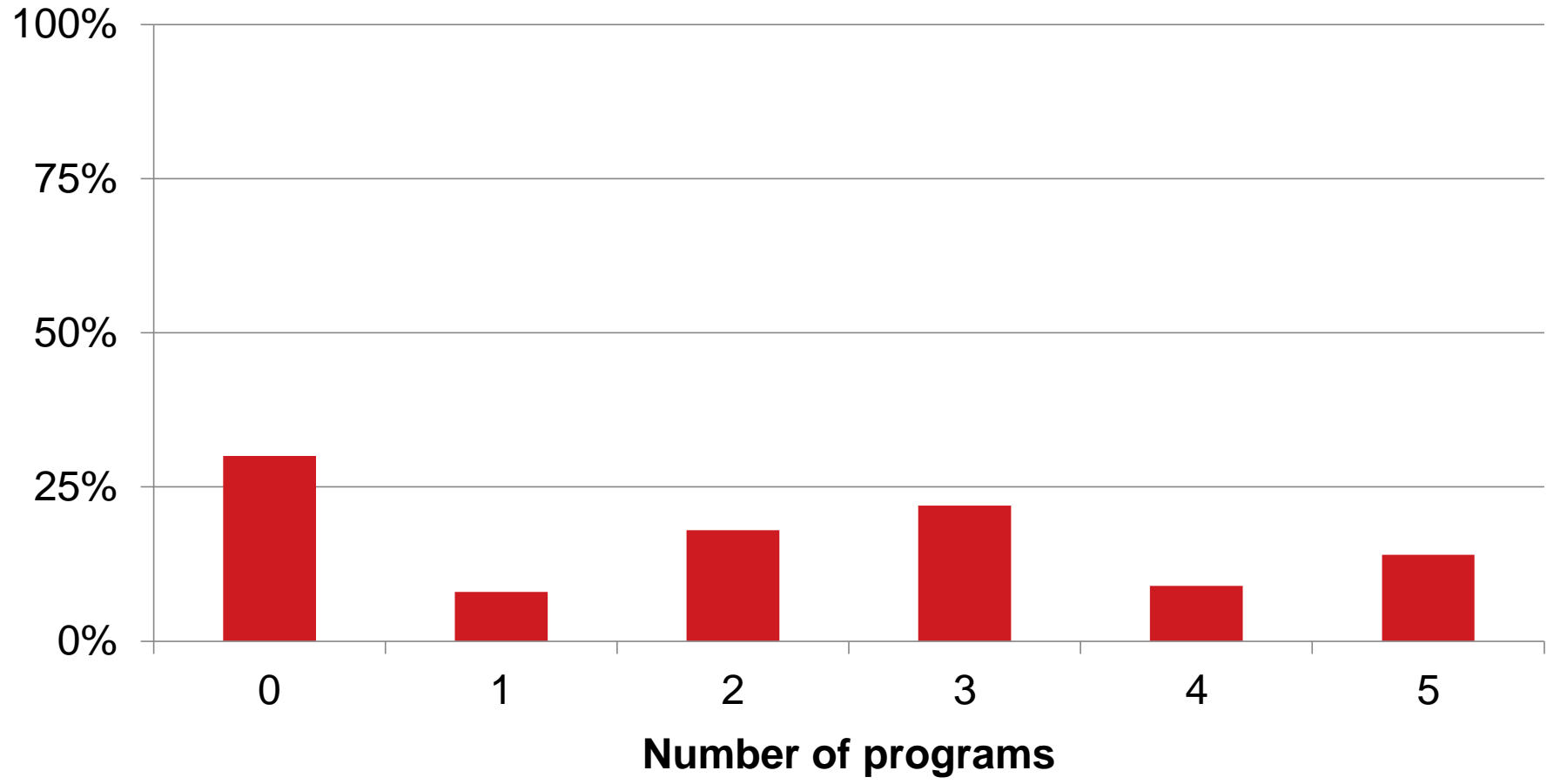
PROGRAM LENGTH



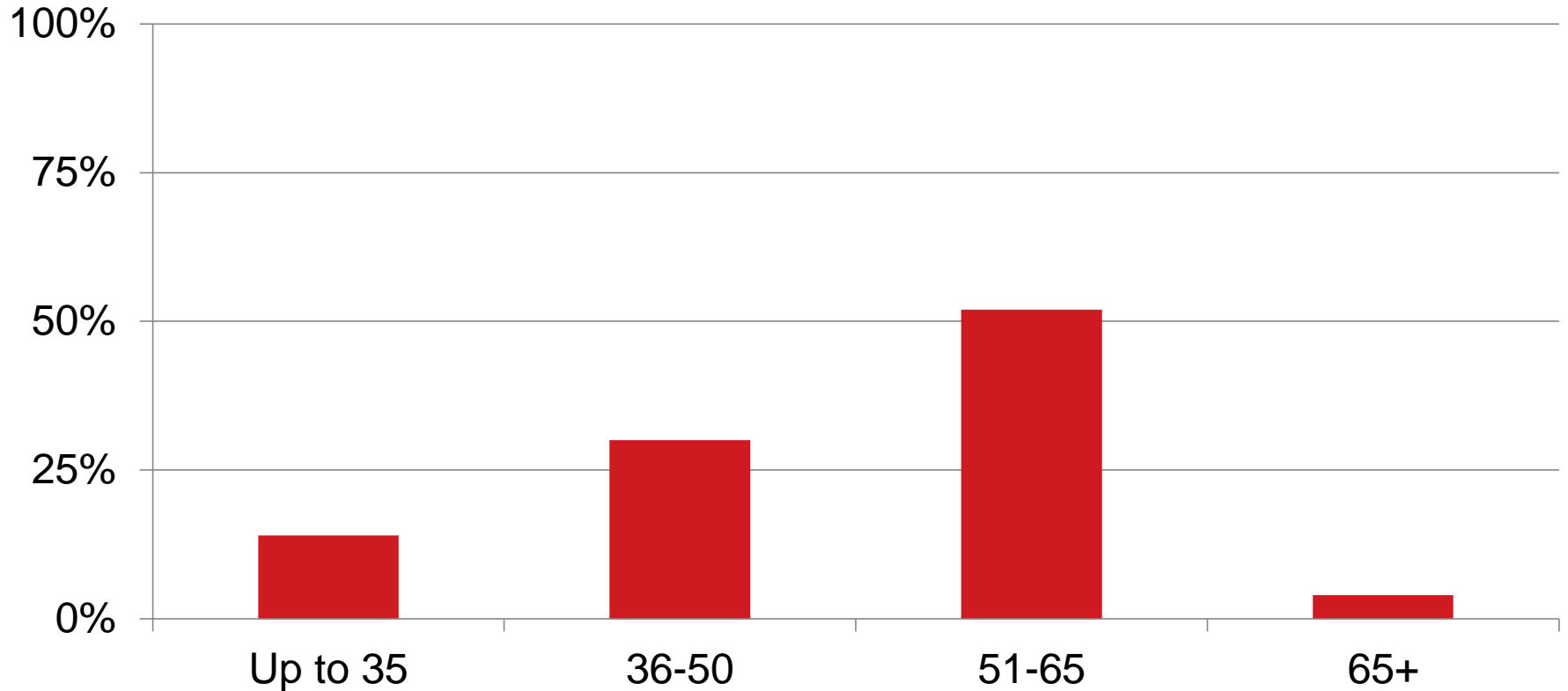
During what months would you participate in online/in-person fertilizer education?



How many fertilizer education events have you attended in last two years?



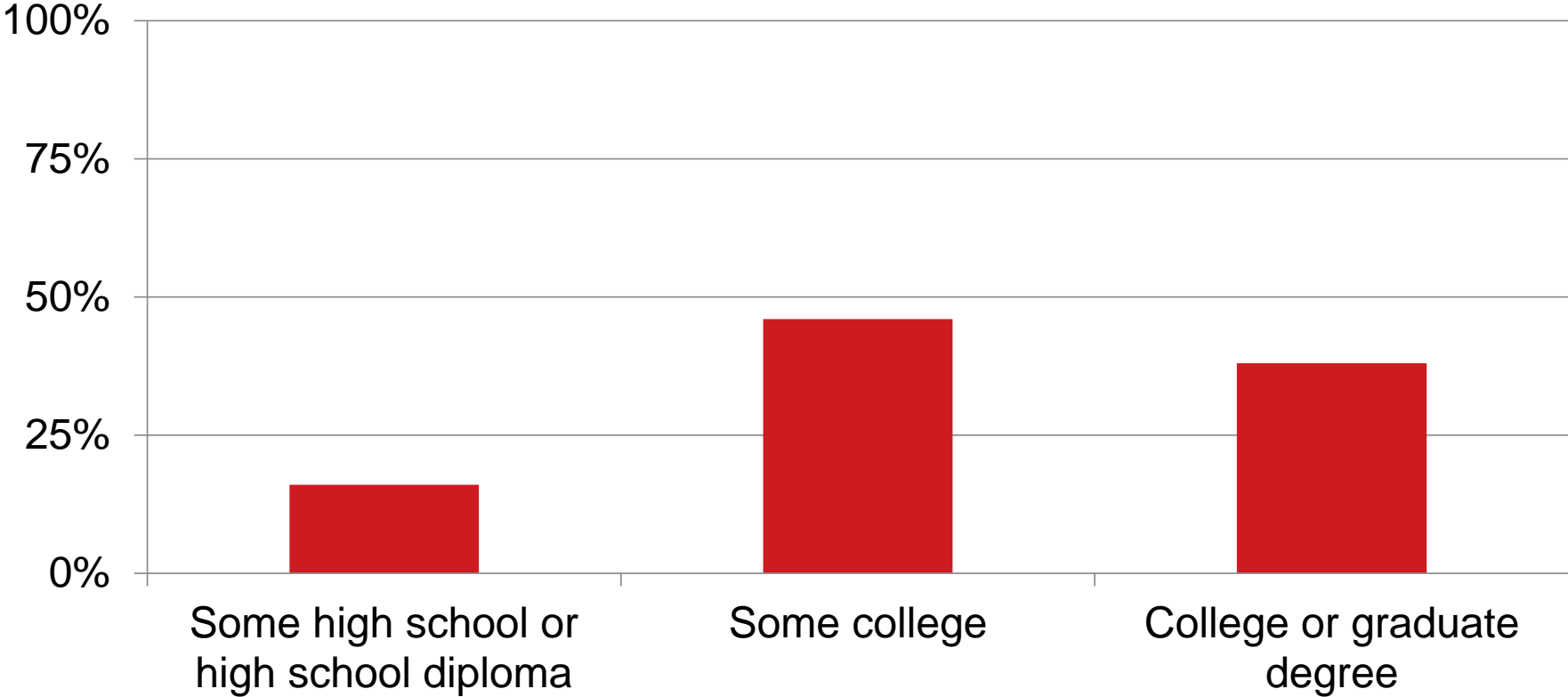
What is your age?



Average age: 50 years, range: 23-77 years



What is your highest level of education?



Summary statements

- Checklist for conducting educational program:
 - In-person
 - One-half day
 - Tuesday or Wednesday mornings
 - January or February
 - Industry speakers



RISK ASSESSMENT PERSPECTIVES



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Producer

VS.



**Dealer/
consultant**



Importance of factors in fertilizer rate decisions/recommendations

Factors	Producers	Dealers
Economic optimum yield response	96%	92%
Peace-of-mind optimum yield	92%	91%
Minimizing pollution to environment	87%	72%
Crop response to fertilizer	85%	94%
Costs of fertilizer products	77%	66%
Water quality	74%	69%
Threat of future regulators	49%	40%
Dealers' time/labor/equipment	47%	64%
Public perception of fertilizer	25%	25%



Comparing associated risk

To what extent do you agree with the following statements?

(strongly disagree= -2, somewhat disagree= -1 , neutral=0. somewhat agree=+1, strongly agree = +2)

	Producers	Dealers
Profitable to fertilize for 90% than 110% yield	0.48	-0.12
Today's corn hybrids are more N efficient	1.20	1.06
Bothered that city residents imply farmers over-apply N	1.29	1.23
Earth's climate is changing	0.01	0.26
N rate will be regulated in 5 years	0.23	0.46
University N recommendations are too high	0.63	1.18
Farm finances limit N use most years	0.52	-0.23
I'd manage N differently if I had more time, other equipment	0.27	0.60
Insurance gives me peace-of-mind	1.43	1.10
I have a reputation as a steward of the environment	1.38	1.26
I'm concerned about N loss in excessive rains	1.48	1.33
I'm comfortable selling on futures market	0.85	0.26



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Summary statements

- Understand and appreciate **risk-factor differences** between decision makers and decision influencers
- Risks are perceived differently by audience:
 - Agronomic risk is a predominate factor to both
 - Producers are more sensitive to economic risks
 - Environmental risk sensitivity is inconsistent
 - Logistical risk is more important to dealers



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