



Cotton Competitiveness Conference

**Moving Product from Field to
the Gin**

--Module Handling Survey

June 16, 2013



Conventional Modules







New Generation “Square”



Round Bale Modules



Flexibility of Equipment



Flexibility of Information RFID Chip



RFID Chip

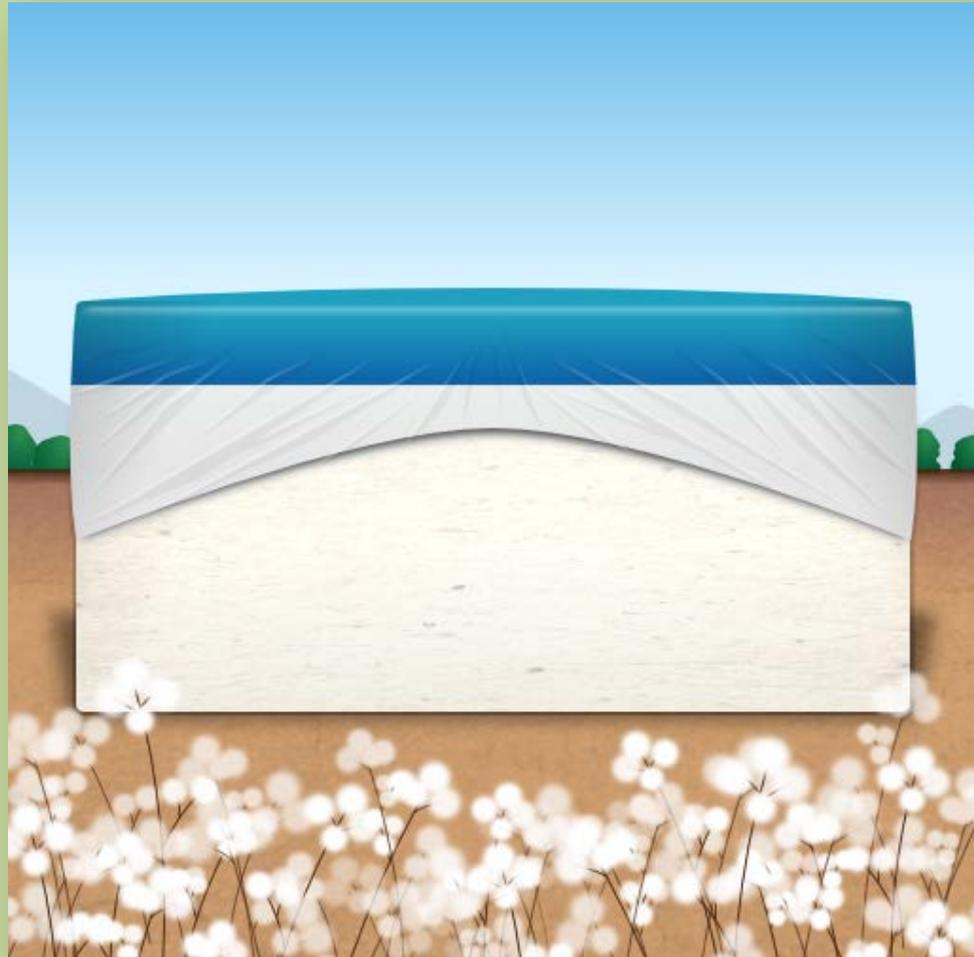
- Field information stored by picker
- Can be linked with additional field data stored elsewhere-variety, inputs, conditions, other.
- Can be coordinated with supply chain when marketplace needs it.

Smart Phone Facts

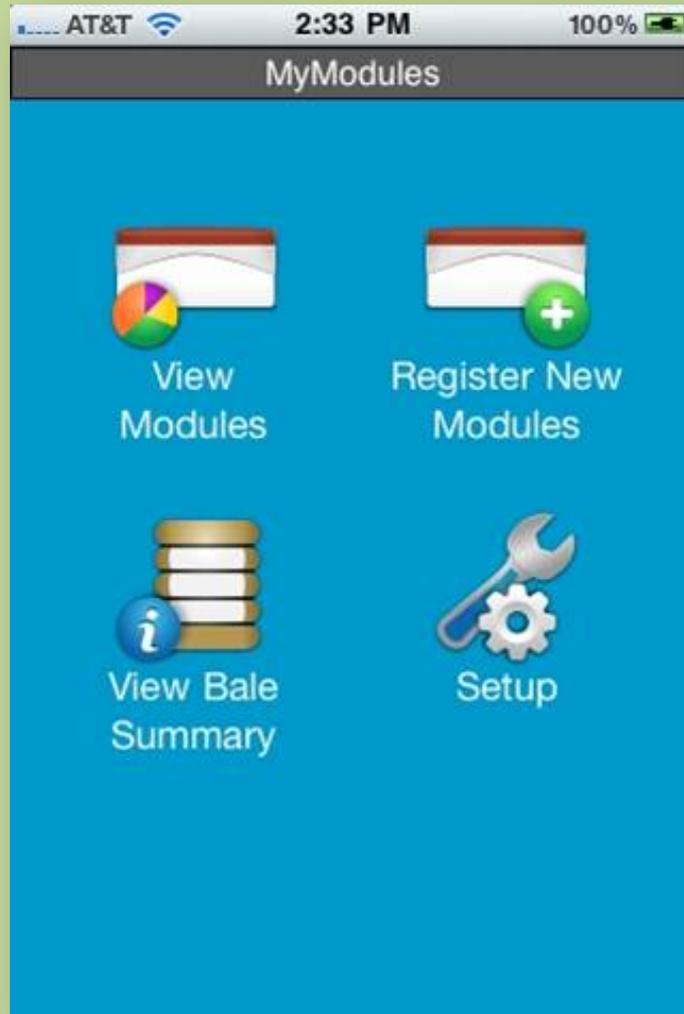
- **46% of Mobile users have a smart phone**
- **This increased by 35% since May 2011**
- **50.9% use Android phones and 23.8% use iPhones**
- **89% use their smart phones throughout the day**
- **25% get on the web only using their smart phones**
- **69% use it for downloadable apps**



My Modules



Functions



Module Registration

MyModules - Register New Modules

Gin Demo Cotton Gin

Producer Joe Farmer

Farm 1000

Field

Module 2001

of Modules 5

Save Cancel Modules Queued 0



View Modules



Functions



Scale Ticket Matching

Carrier		12:15 PM	
Back		Load Detail	
Shipping Record: 1374			
Producer	Joe Grain and Sons		
Date Loaded	04/02/2012		
Commodity	Soybeans		
Farm	1714		
Field			
Variety			
Trucking Co	ABC Trucking		
Driver Name	Jed Edwards		
Harvester			
Location Sent	Mound, LA		

Carrier		12:16 PM	
Back		Load Detail	
Location Sent	Mound, LA		
Scale Ticket: 188888			
Date Weighed	04/02/2012 00:00:00		
Net Lbs	71522.00		
Gross Units	1100.00		
Net Units	1000.00		
Moisture	11.5		
Damage	2.0		
Test Weight	54.0		
FM	2.0		
Percent of Load	1.0		
Scale Location	Mound, LA		

Cotton Warehouse Locator



The screenshot shows a mobile application interface for a Cotton Warehouse Locator. At the top, there is a status bar with icons for lock, mail, and battery, along with the time 2:32. Below the status bar is a header bar with the text "Cotton Warehouse Locator". Underneath the header is a search input field with a blue border and a "Search" button to its right. Below the search field, there is a message that reads "Please enter at least three characters." The bottom of the screen shows the standard Android navigation bar with icons for back, home, and recent apps.

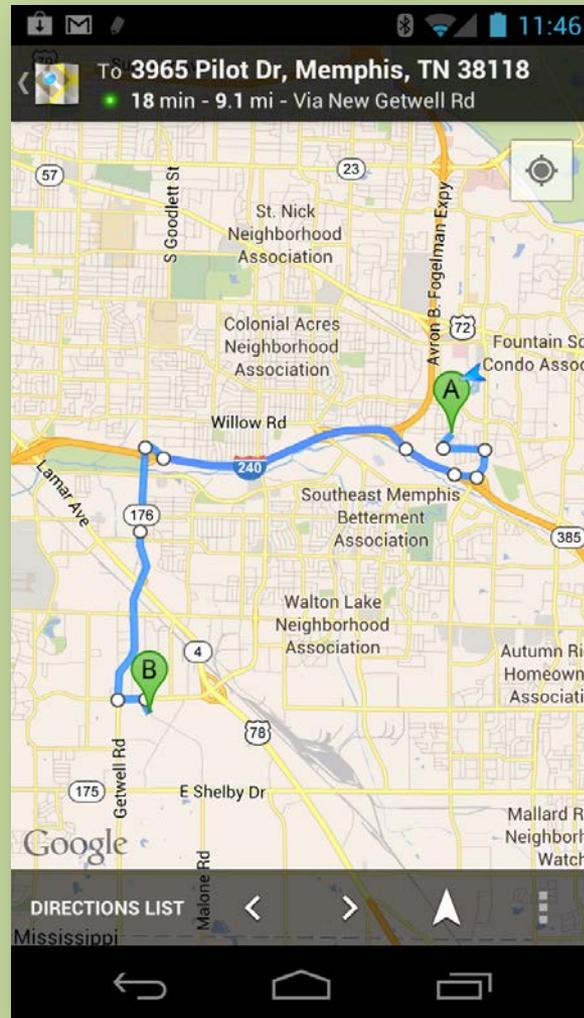
Locations

The image shows a mobile application interface with a status bar at the top displaying various icons (lock, mail, USB, signal, location, Wi-Fi, cellular, battery) and the time 10:52 AM. Below the status bar is a header labeled "Locations". The main content area lists two entries, each with a red location pin icon and a small map thumbnail showing a road network with a red pin and a blue shield labeled "280".

International Cotton Depots #3
4259 Air Trans Road
Memphis, TN 38118
(901)753-5026

International Cotton Depots #4
3965 Pilot Drive
Memphis, TN 38118
(901)753-5026

Map

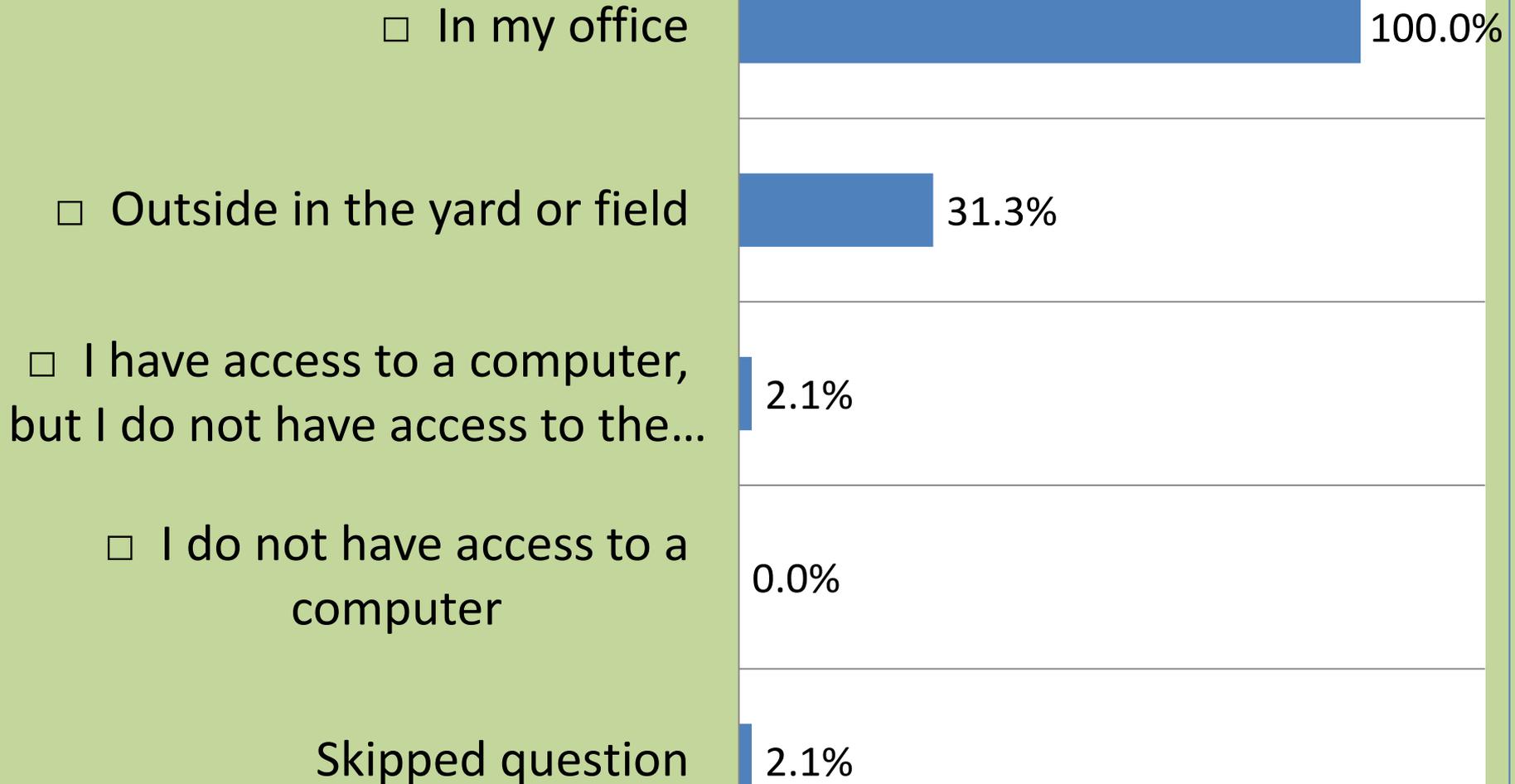


Future Interest

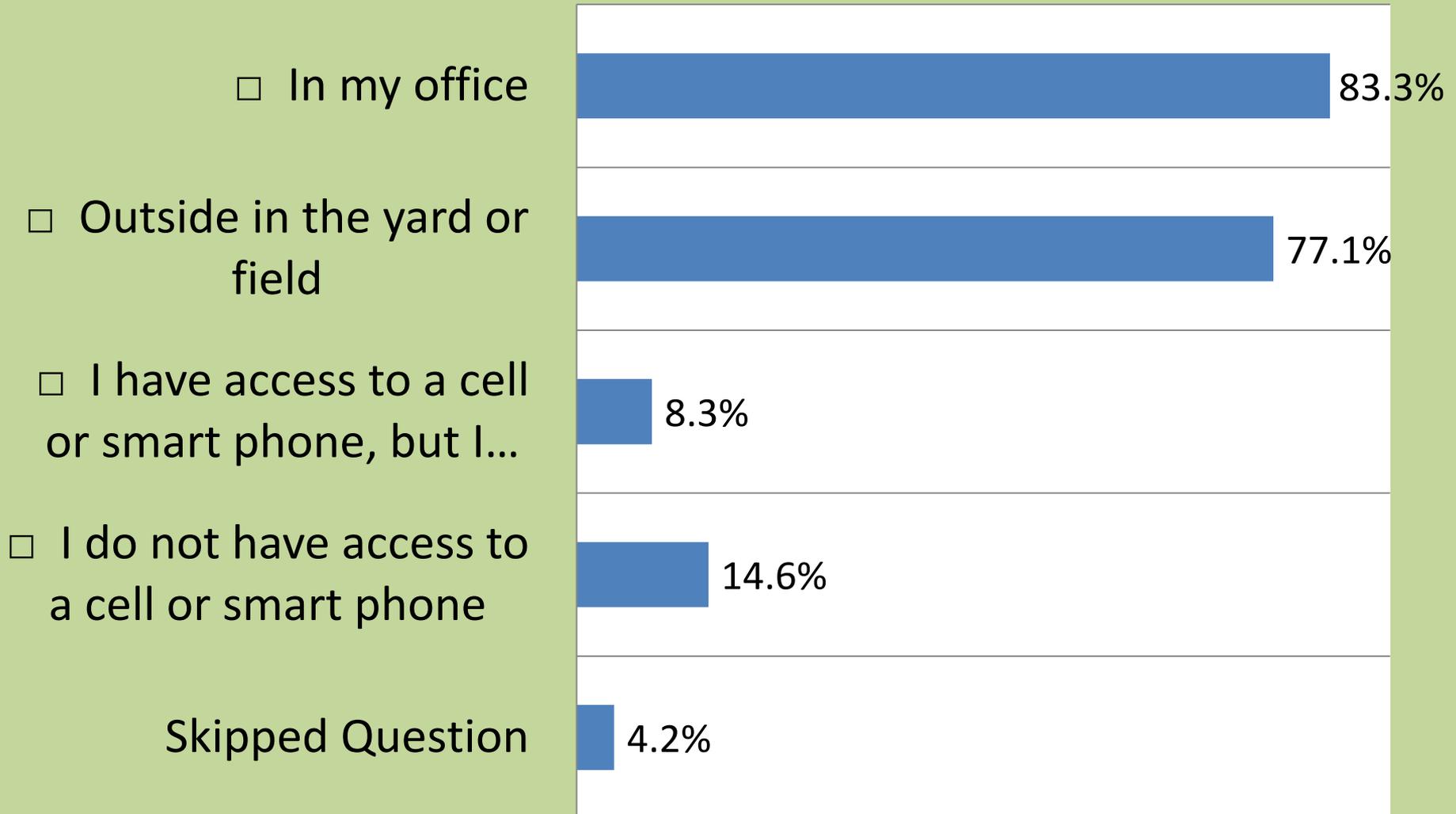
- There is growing interest in technologies to track cotton from field through the gin and beyond.
- Survey to determine existing state of communications and perceived needs of ginners.

**Cotton Ginners
Module Information and
Management Survey**

1. Deals with internet access

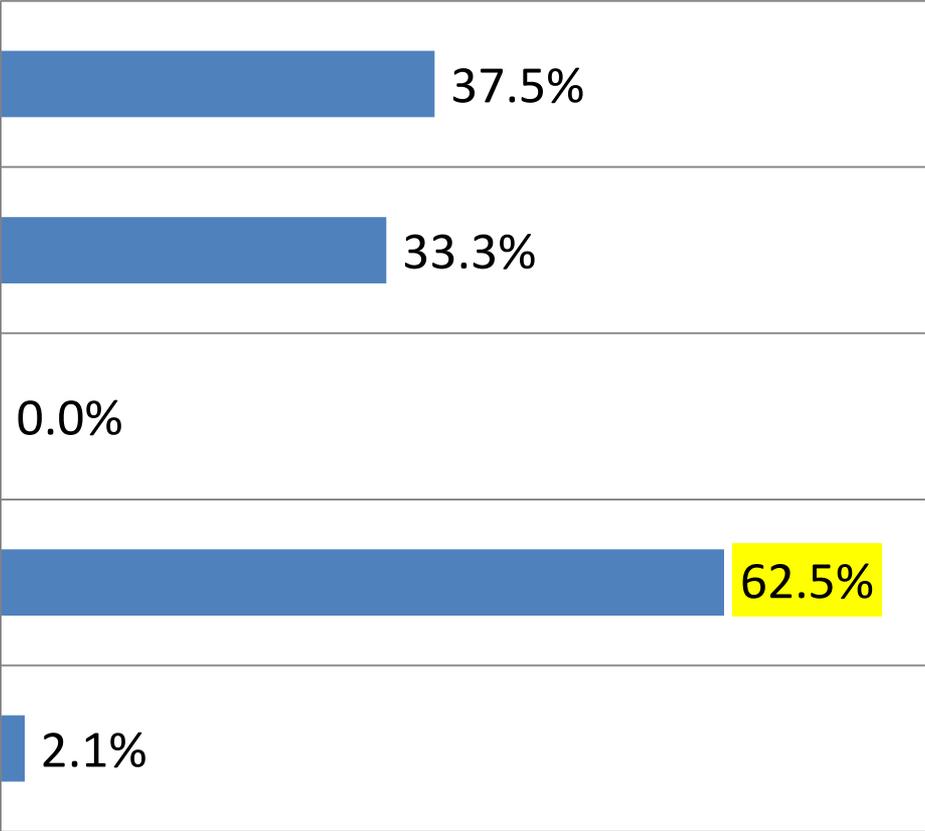


2. Can you access the internet on a cell or smart phone in the following locations at work?

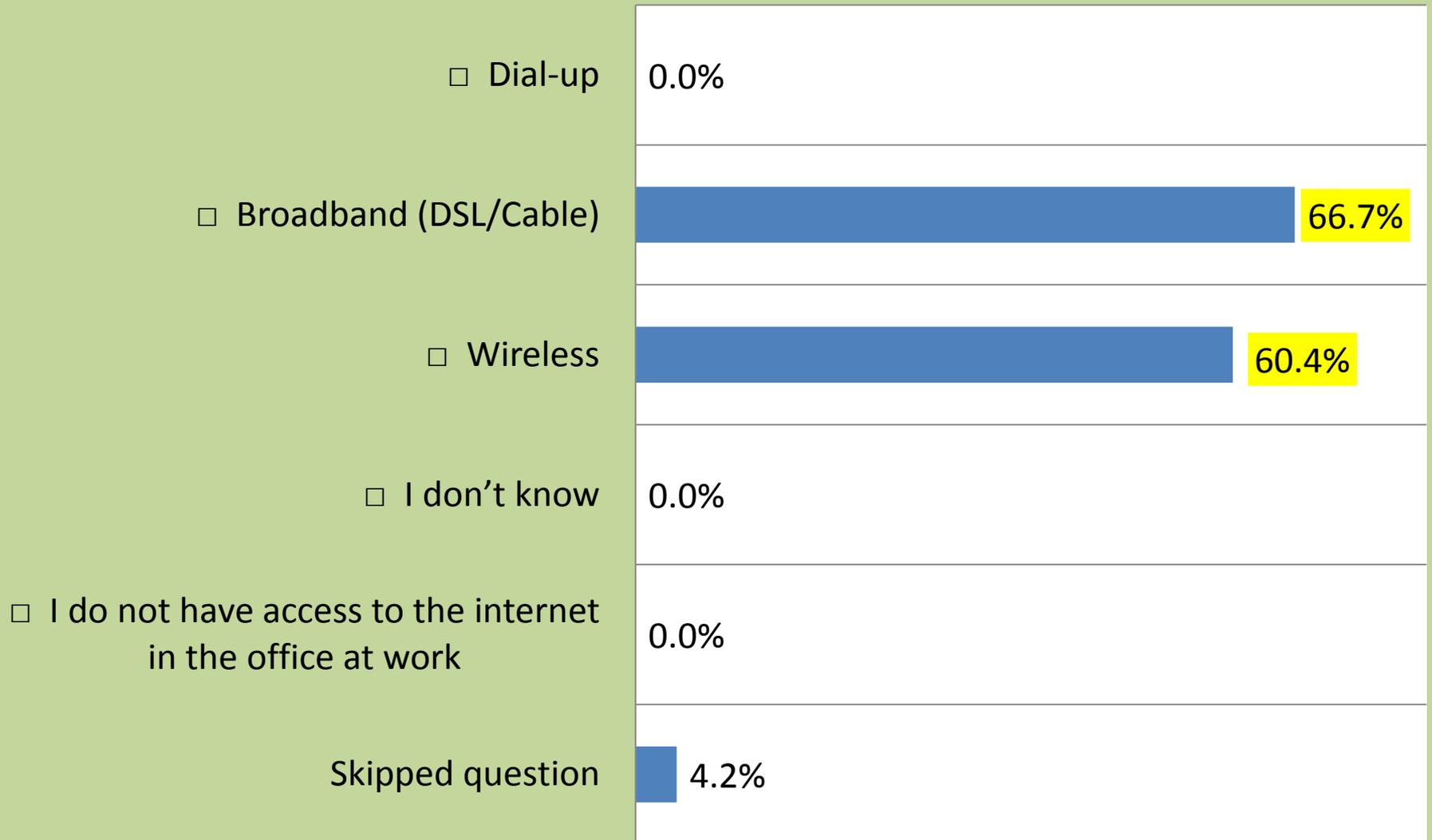


3. Can you access the internet on a tablet (a hand-held mobile computer with either a touchscreen or pen enabled interface such as an iPad, Samsung Galaxy, Motorola Zoom, etc.) in the following locations at work?

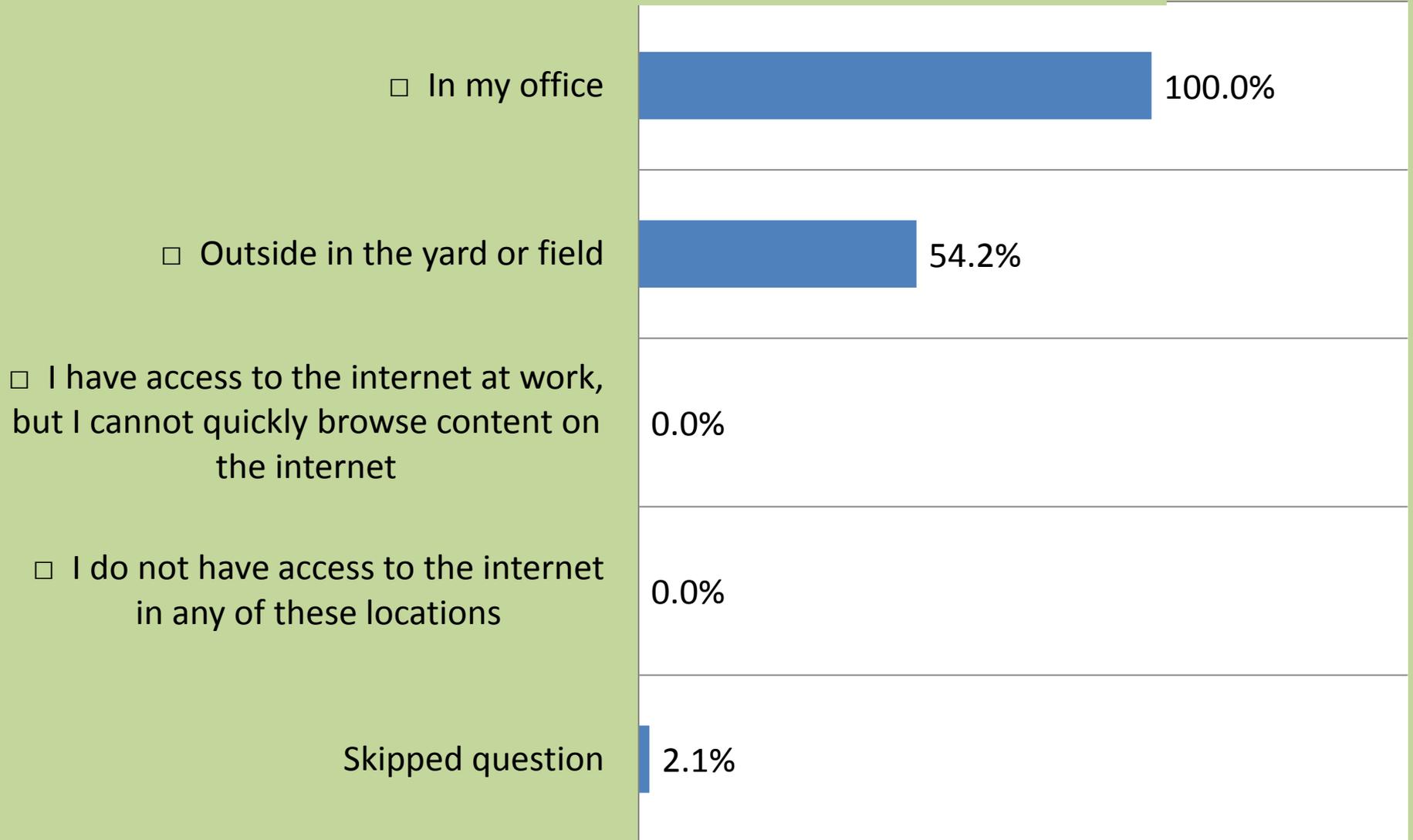
- In my office
- Outside in the yard or field
- I have access to a tablet, but I do not have access to the...
 - I do not have access to a tablet



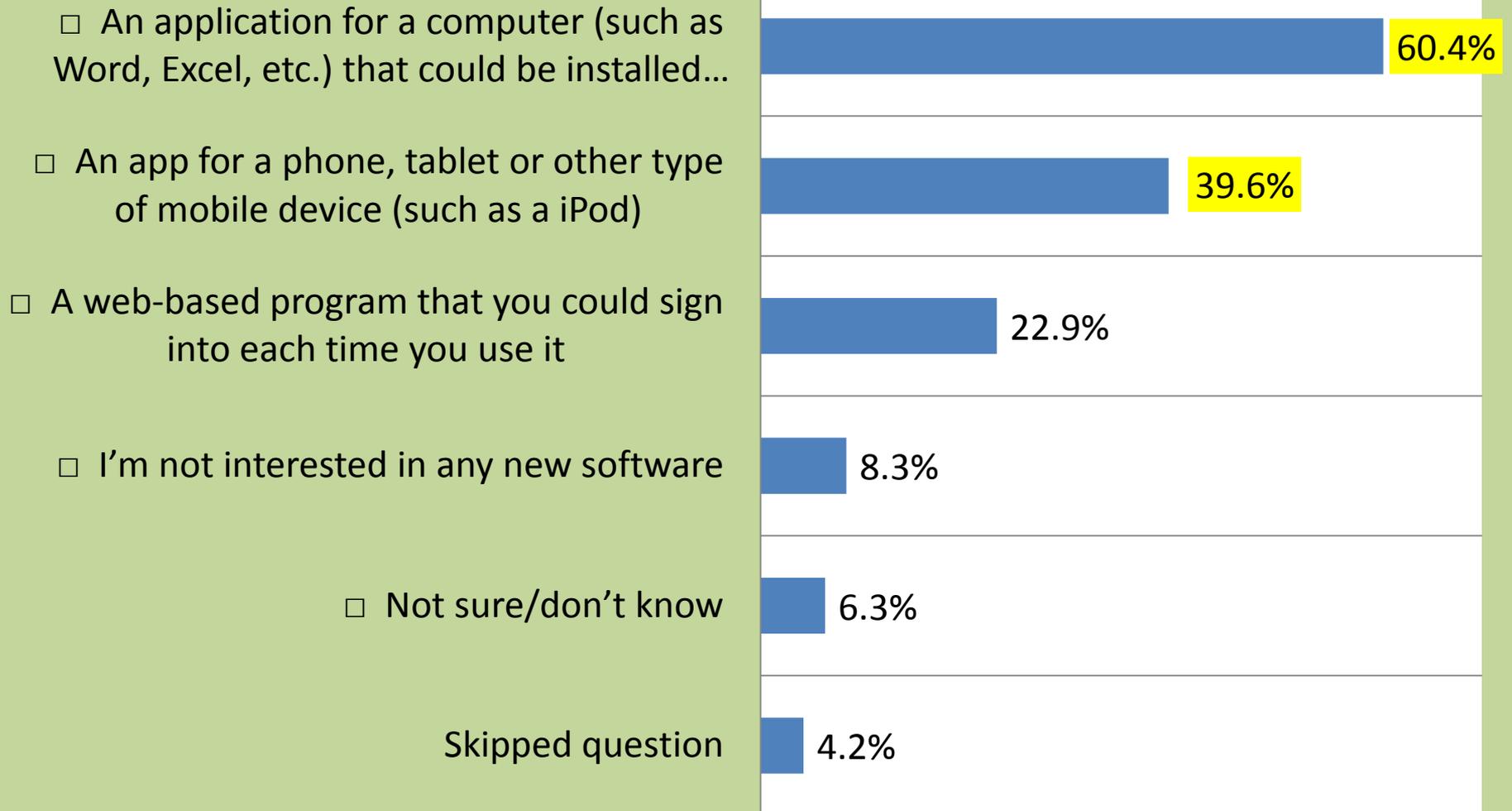
4. What type internet connections do you have while in the office at work? Please check all that apply.



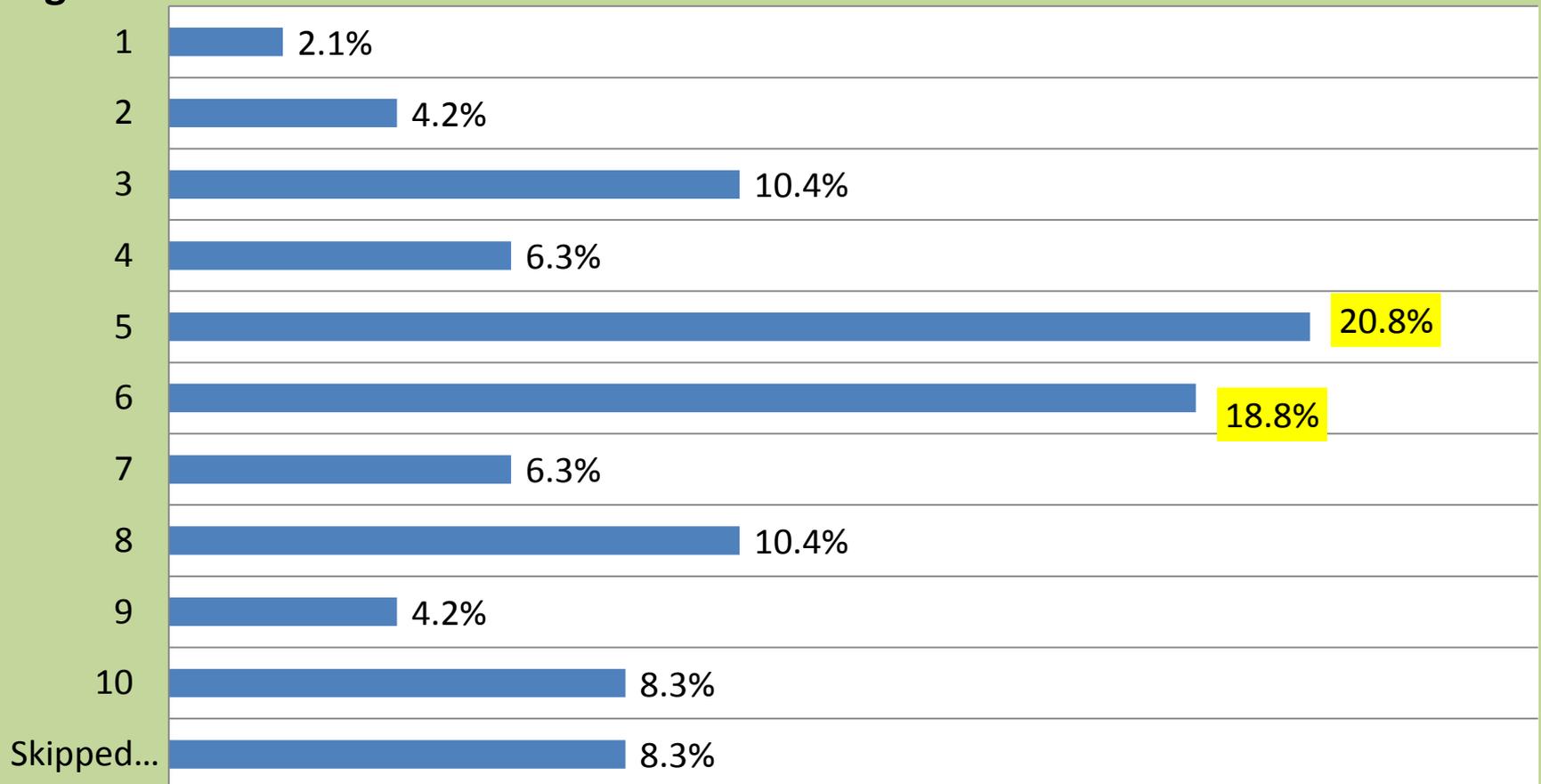
5. Can you quickly browse content on the internet in any of the following locations at work. Pease check all that apply.



6. In you had a choice of the type of software that could help you with your business needs, which would you prefer to use?

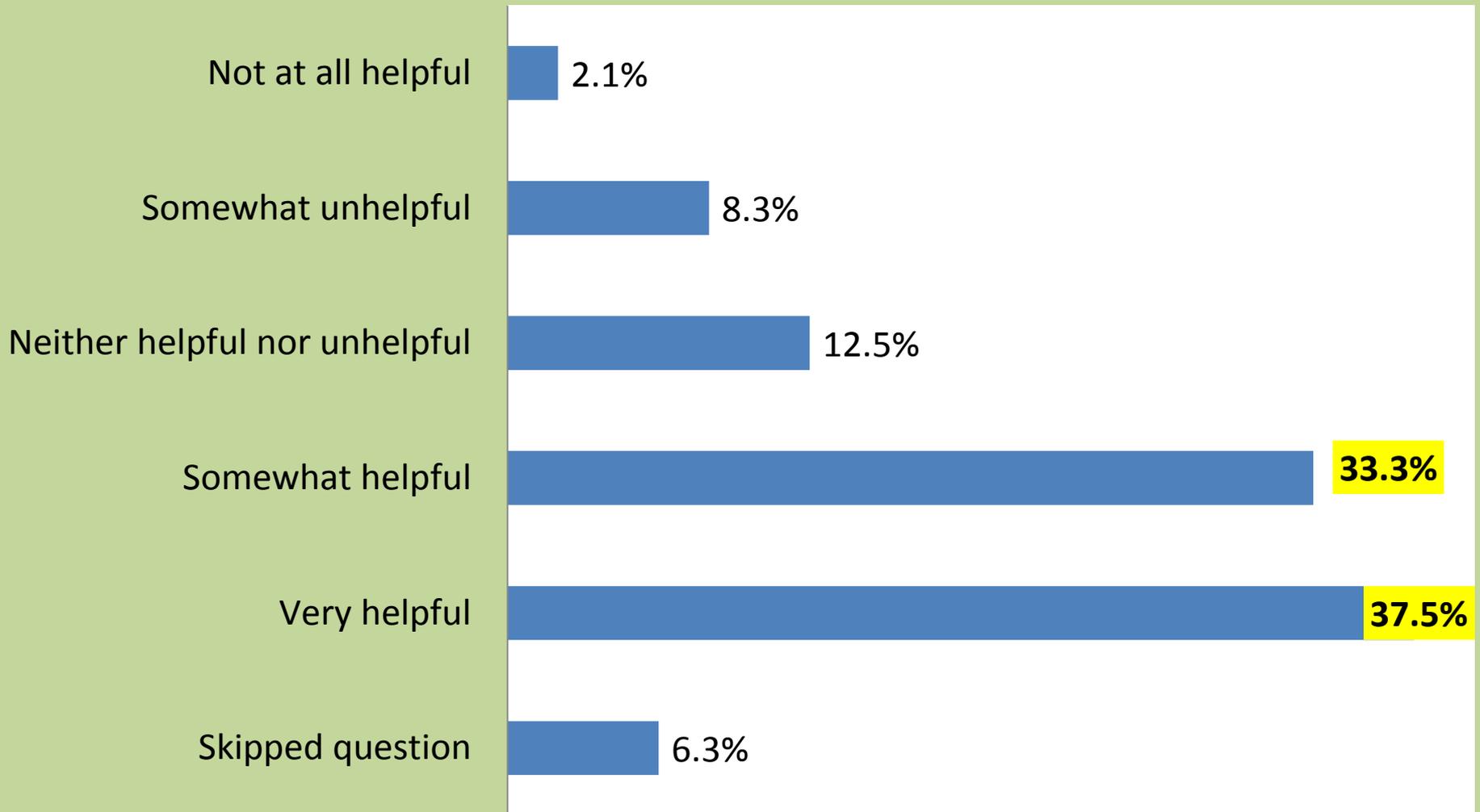


7. On a scale from 1 to 10, where 1 means "No Effort at All" and 10 means "A Significant Amount of Effort," how much effort does your operation have to expend to manage the pickup and yard organization of modules?

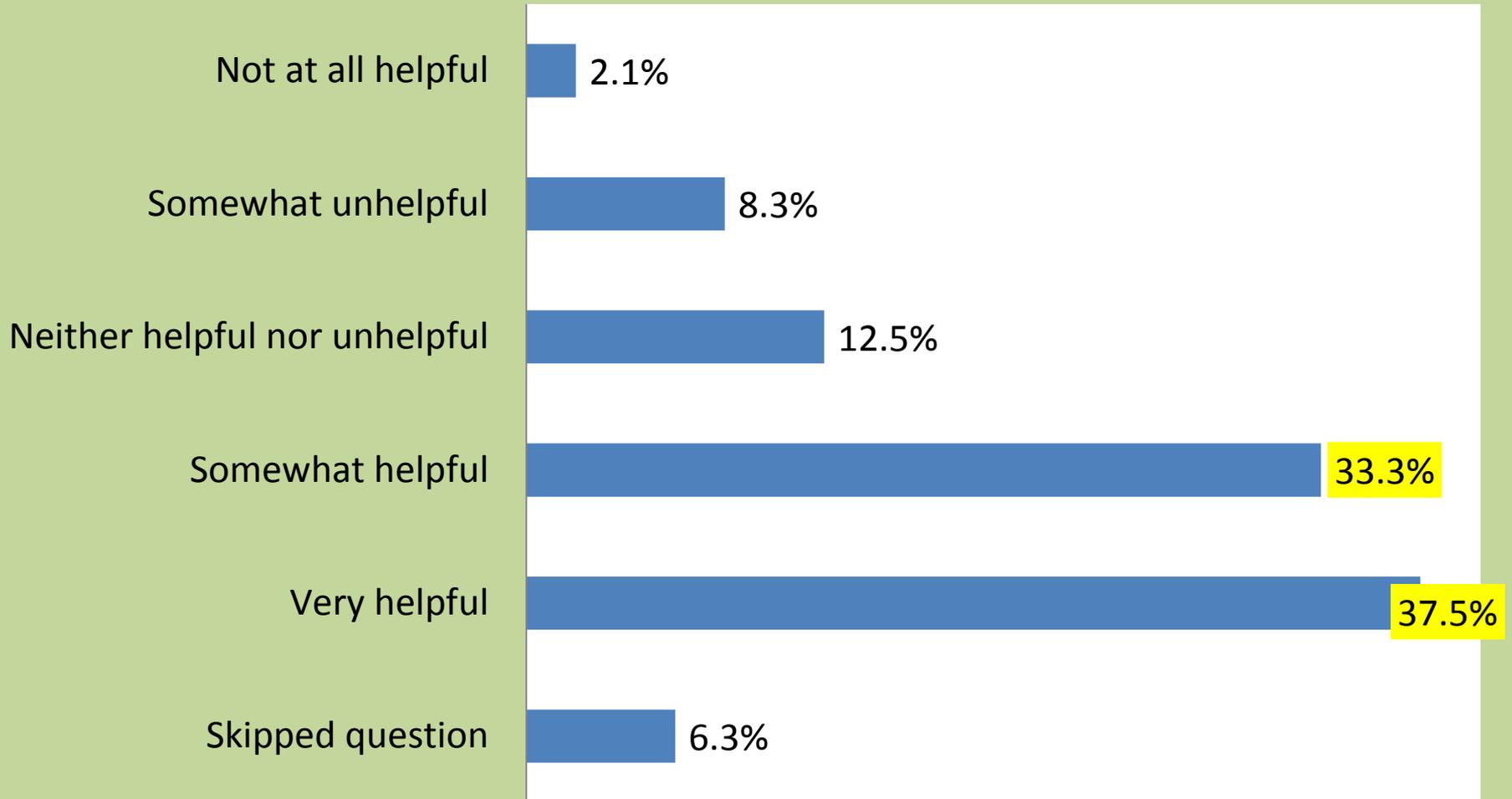


Average rating 5.8

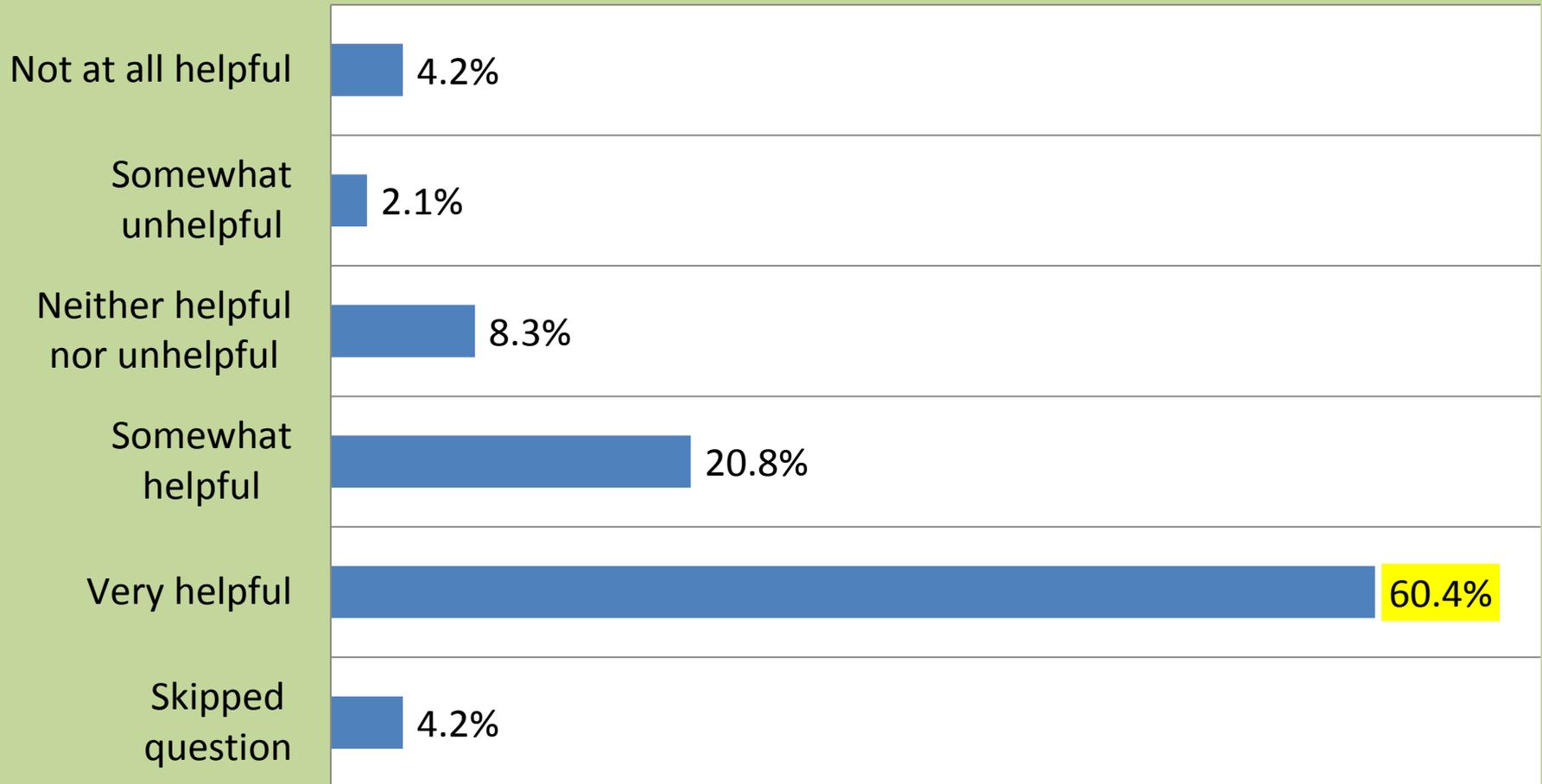
8a. If you had exact GPS coordinates of modules in the farmer's field, how helpful would the GPS information be to DISPATCHING MODULE DRIVERS?



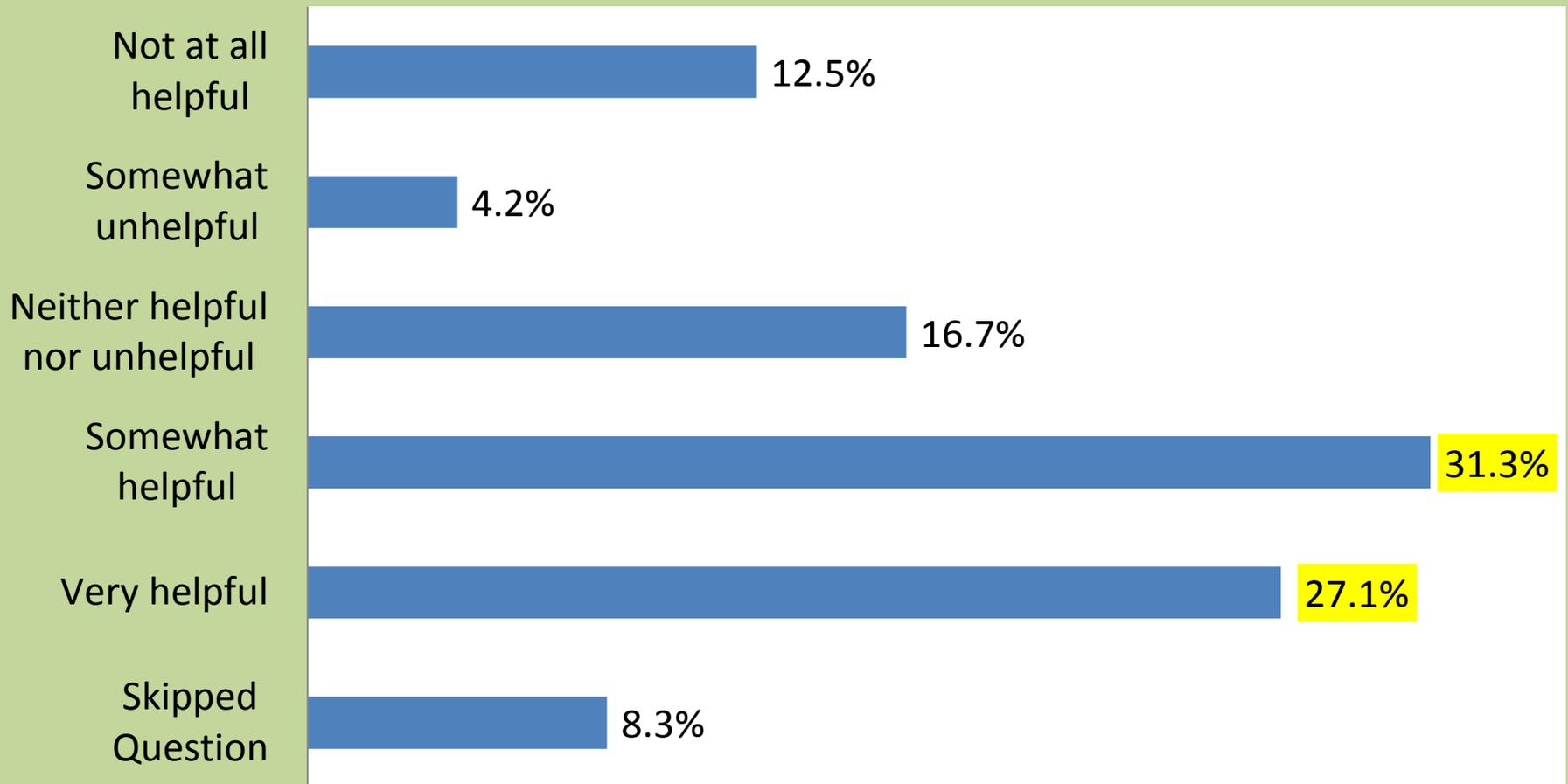
8b. If you had exact GPS coordinates of modules in the farmer's field, how helpful would the GPS information be to INSURING DRIVERS MAKE FEWER MISTAKES?



8c. If you had exact GPS coordinates of modules in the farmer's field, how helpful would the GPS information be FOR USING NEW DRIVERS WHO MAY NOT BE FAMILIAR WITH THE ROADS?



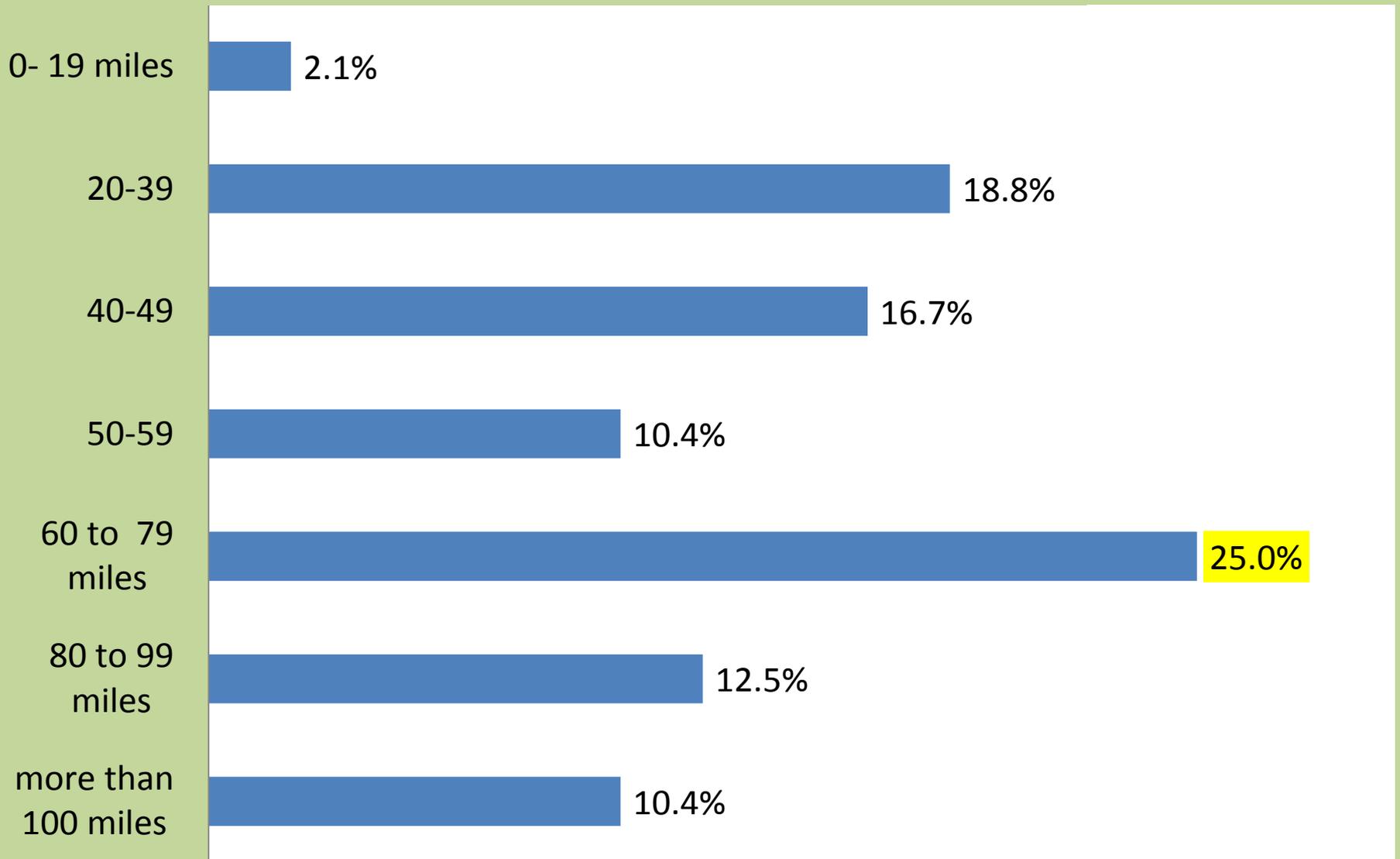
8d. If you had exact GPS coordinates of modules in the farmers field, how helpful would the GPS information be to AVOIDING HAVING GROWERS PHONE IN MODULE INFORMATION?



8. If you had the exact GPS coordinates of modules in the farmer's field, how helpful would the GPS information be to the following actions in your operation? For each action listed below (a through d).

	Not at all helpful	Somewhat unhelpful	Neither helpful nor unhelpful	Somewhat helpful	Very helpful	Skipped Question
a. Dispatching module drivers	2.08%	8.33%	12.50%	33.33%	37.50%	6.25%
b. Insuring drivers make fewer mistakes	2.1%	4.2%	14.6%	27.1%	47.9%	4.2%
c. Using new drivers who may not be familiar with the roads	4.2%	2.1%	8.3%	20.8%	60.4%	4.2%
d. Avoiding having growers phone in module location information	12.5%	4.2%	16.7%	31.3%	27.1%	8.3%

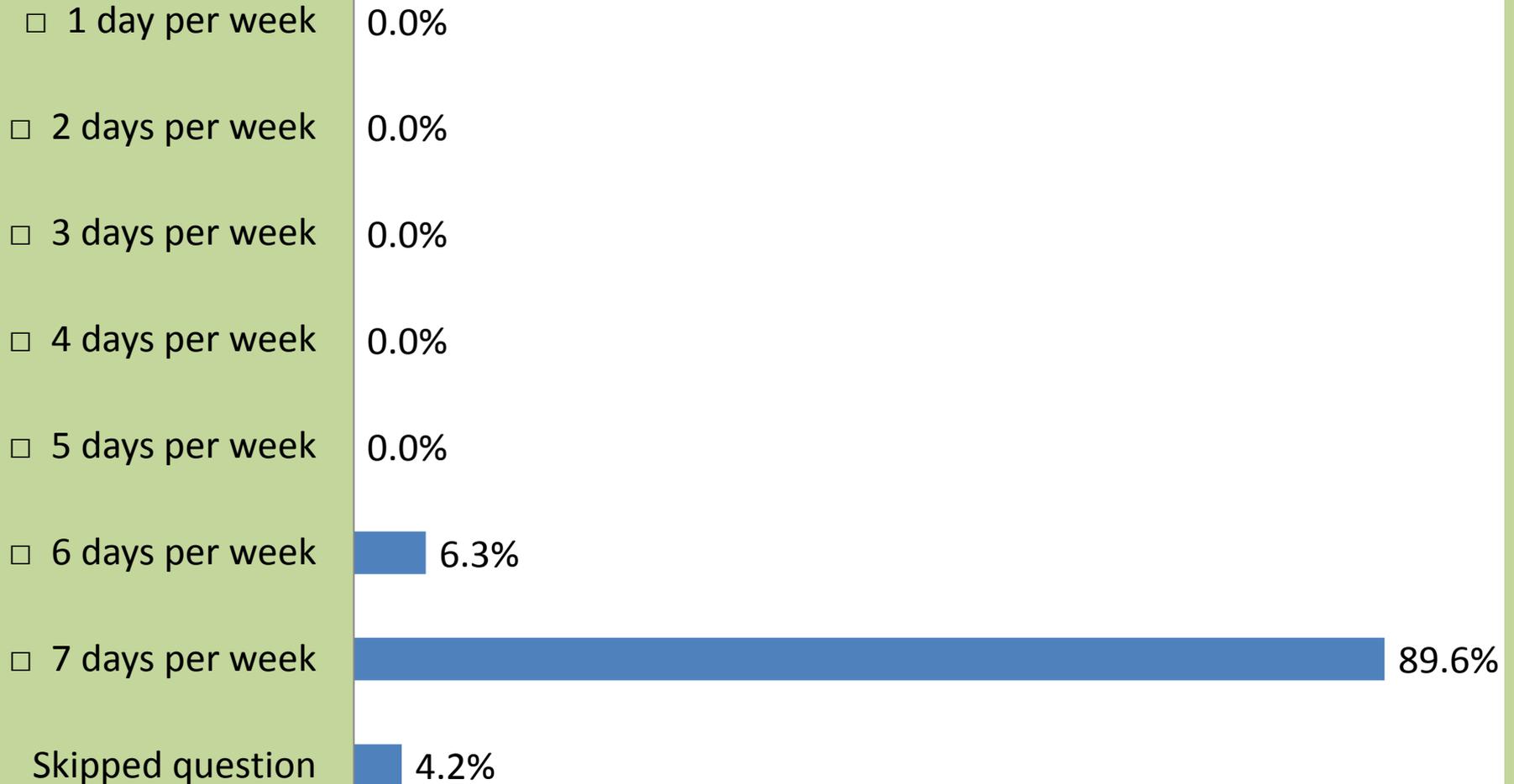
9. On average, what is the farthest distance (one way) you have to transport modules?



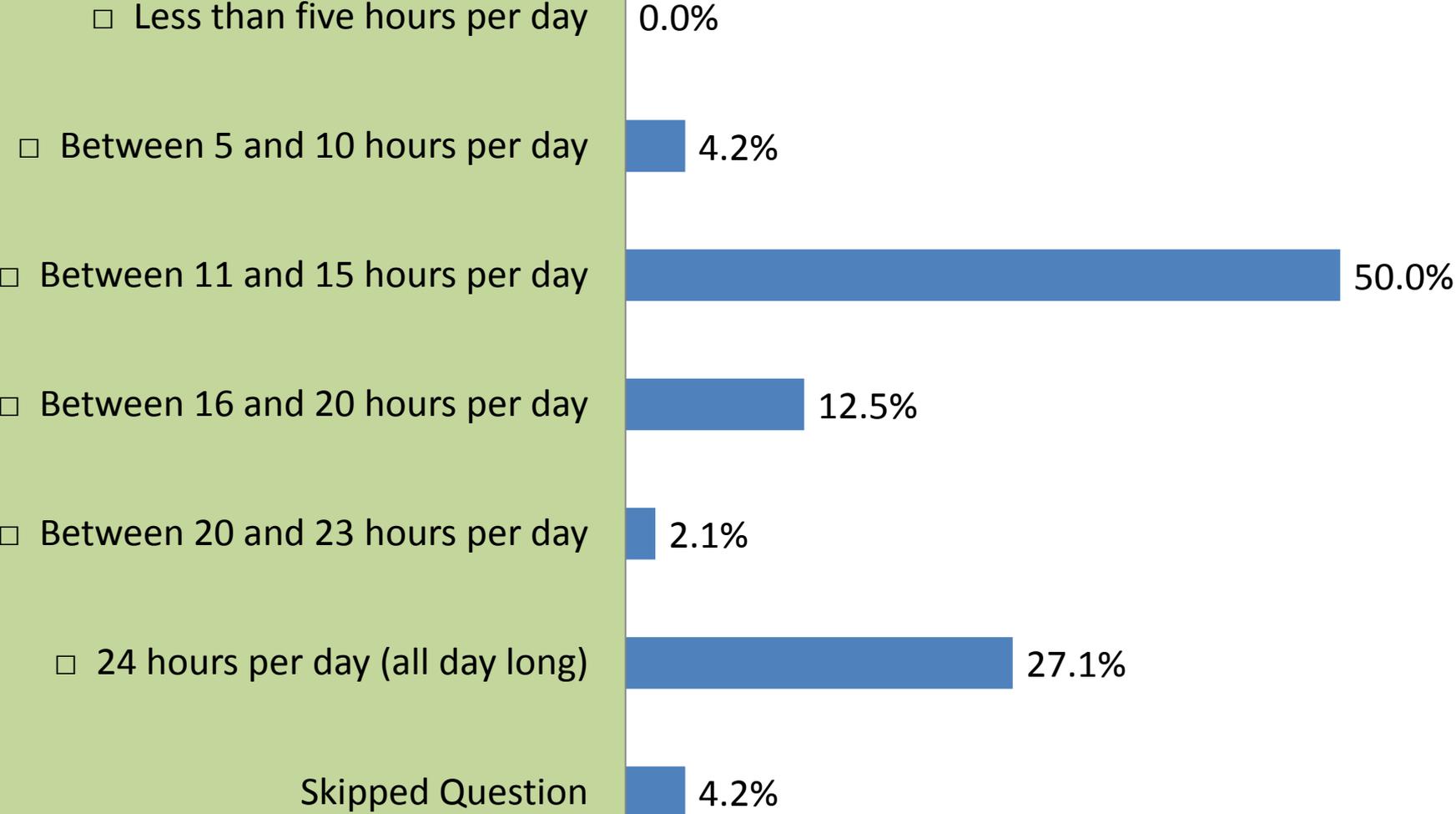
10. When a module is delivered, how helpful would knowing the following information be to your operation? For each type of information listed below (a through c), please place an 'X' under the column that best describes how helpful the information would be to your operation.

	Not at all helpful	Somewhat unhelpful	Neither helpful nor unhelpful	Somewhat helpful	Very helpful	Skipped Question
a. Location information for every module	2.1%	0.0%	2.1%	35.4%	54.2%	6.3%
b. Time of delivery information for every module	6.3%	2.1%	16.7%	35.4%	33.3%	6.3%
c. Producer name for every module	4.2%	0.0%	4.2%	25.0%	60.4%	6.3%

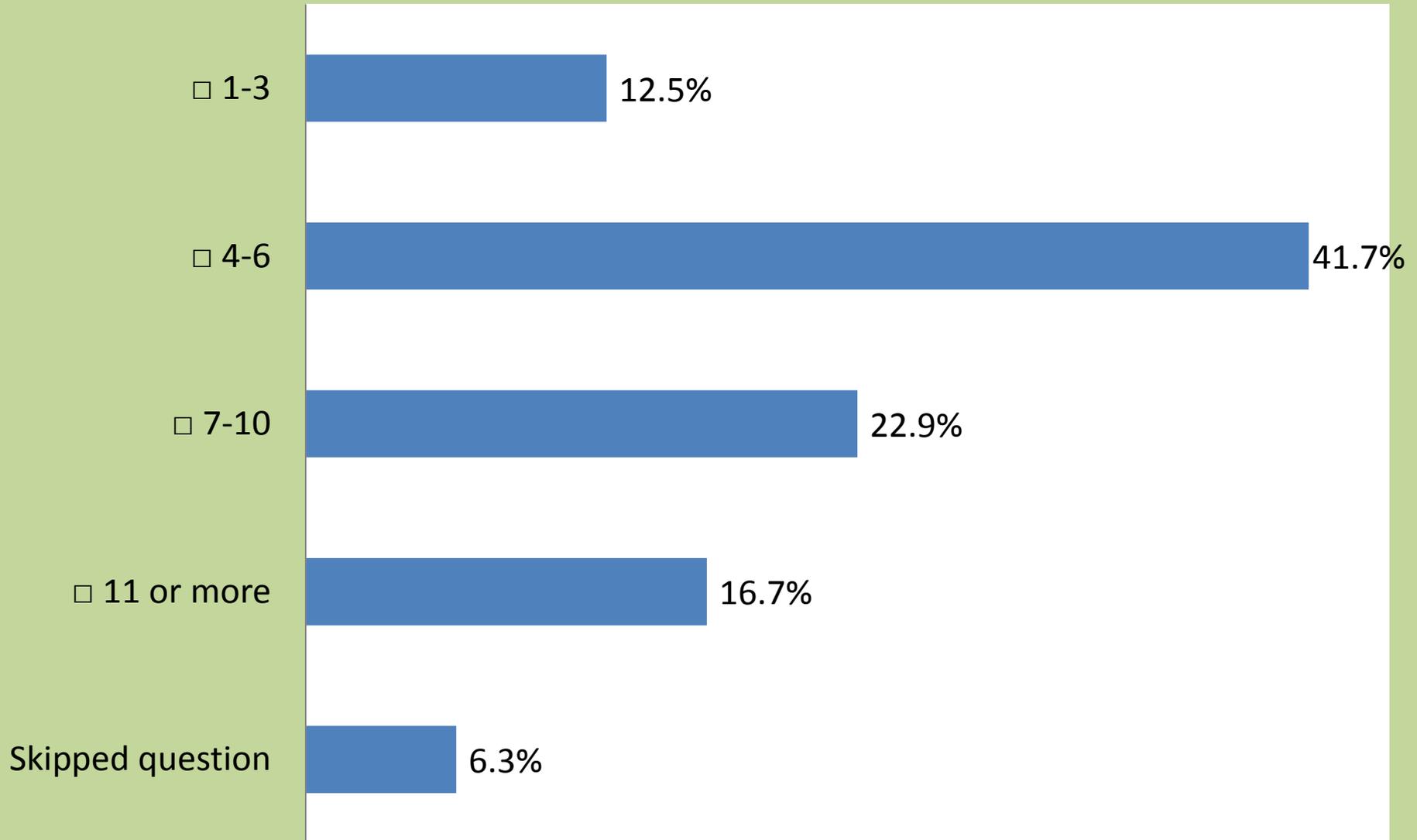
11. During the harvest or ginning season, how many days per week do module trucks run in your operation (excluding the yard truck)?



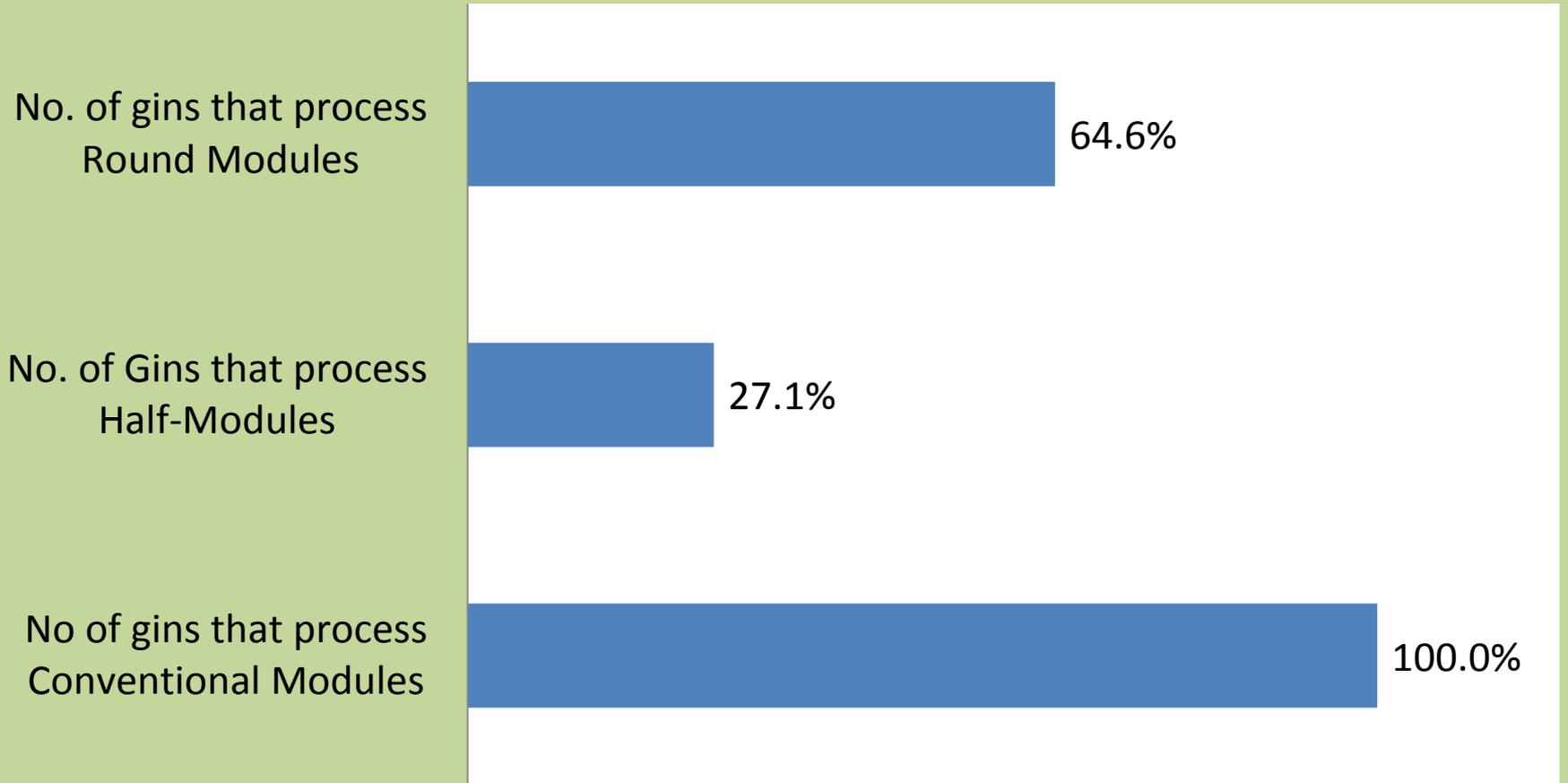
12. Of those days, how many hours per day do module trucks run in your operation?



13. During the height of the ginning season, how many module truck drivers do you have in your operation?



14. Thinking about all of the cotton modules you gin in a year, on average, about what percentage of those modules are round, half, and conventional?

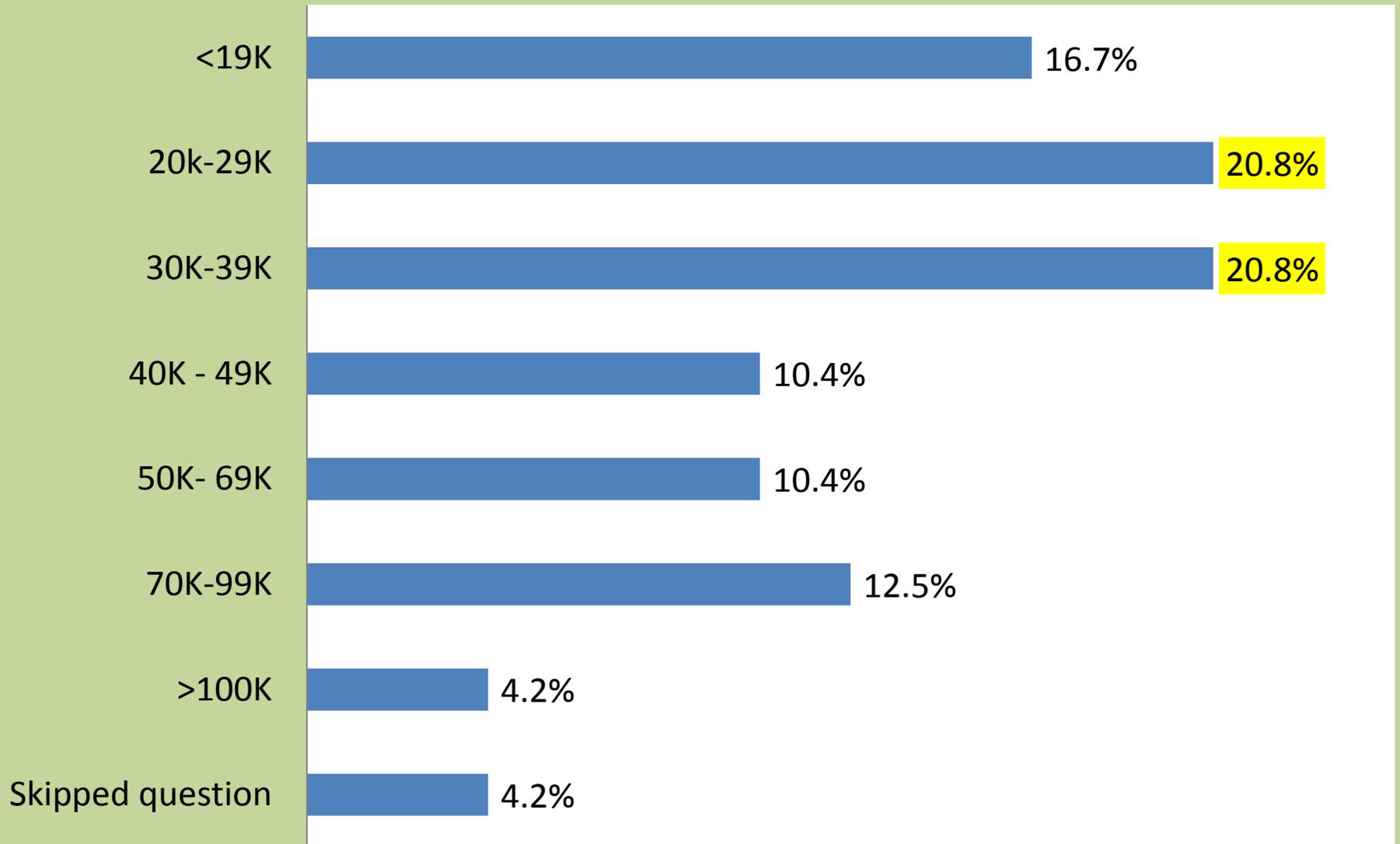


Number of bales in survey:
412,000 bales from RBM

62,000 bales from Half Modules

1,533,000 bales from conventional modules

15. On average, about how many bales of cotton does your operation gin in a year?



16. If you were able to know the moisture level of seed cotton in modules, how likely would you be to use the moisture level information to do the following in your operation?

	Not at all likely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Skipped question
a. I would use the information to set priority pickup for wet modules.	8.3%	0.0%	8.3%	35.4%	41.7%	6.3%
b. I would use the information to eliminate the need to probe modules for temperature on the gin yard.	14.6%	6.3%	18.8%	25.0%	27.1%	8.3%
c. I would use the information to adjust drying temperatures and gin process rates for modules.	8.3%	2.1%	12.5%	29.2%	41.7%	6.3%
d. I would use the information to influence the sequence of ginning modules to gin wet modules first.	8.3%	6.3%	6.3%	35.4%	37.5%	6.3%

17.(PAGE 1 OF 2) If you were able to know the moisture level of seed cotton in modules, what ways, other than those listed in the question above, would you use the moisture level information in your operation? Please record the other ways you would use the moisture level information in your operation..

Gin No.	Comment
1	It would be beneficial to know moisture to be able to adjust for heat.
2	If we knew the moisture, it would help us in determining which direction to send the seed in the seed houses
3	Locate high moisture modules in a specific location on the module yard by date
4	Seed storage--long term or ship as soon as possible?
5	It would show the farmer how the weight of the moisture effects the overall weight of the module in what the module yields.
6	Slowing machinery down not to have choke up. Knowing to watch more closely for tags in the gin stands.
14	Good for picker driver to know so he could monitor/adjust picking schedule
15	Inform growers how much this affects the grades of their cotton.
17	To try to find out what the producer is doing to place wet cotton in a module.
19	Rank order of pickups for modules
21	I would inform the producers if their cotton was too damp. They would need to check their picking methods and tarps.
22	No technology will replace common sense by the grower. I spend tens of thousands on module covers. Growers with RBM assume their own risk. I don't want to be in the RBM cover business.

17. (PAGE 2 OF 2) If you were able to know the moisture level of seed cotton in modules, what ways, other than those listed in the question above, would you use the moisture level information in your operation? Please record the other ways you would use the moisture level information in your operation. (Page 2 of 2)

Gin No. Comment

- 24 I would like to charge more for wet modules.
- 26 Conditioning: Placement of cottonseed in seed house. Communicating w/ producer to make him aware of the impact wet cotton has on his quality; Gin out-turn of his cotton (%turnout). Ways to correct and improve his harvest time, especially w/round modules.
- 27 Where to store seed in warehouse.
- 29 Adjustment of seed pipe for placement in warehouse.
- 34 Charge more for wet cotton to discourage producers for picking wet cotton.
- 35 It would give us the information to determine whether a wet bale was a gin problem or it had a problem when we got it.
- 38 Advise grower on picking wet cotton
- 41 Segregate cottonseed into different locations based on moisture--store wet seed separately and ship first.
- 42 About 1/2 of their (gin's) cotton is custom harvested; if custom harvest people pick wet cotton they aren't asked back.
- 43 On first of season, heat level of green modules would be helpful.
- 44 Have Sam-Jackson Seed Moisture monitor to segregate wet seed.
- 48 If anything, (If I had extremely dry cotton) adding moisture to gin process.

18. If you were able to know the module weight as modules were formed and staged in the farmer's field, how likely would you be to use the weight information to do the following in your operation? For each action listed below (a through b), please place an 'X' under the column that best describes how likely you would be to use the weight information to perform each action.

	Not at all likely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely	Skipped Question
a. I would use the weight information to arrange module hauling trucks.	62.5%	8.3%	14.6%	4.2%	4.2%	6.3%
b. I would use the weight information to bypass gin scales and take modules directly to the gin yard.	52.1%	10.4%	10.4%	8.3%	8.3%	10.4%

19. (PAGE 1 OF 2) If you were able to know the module weight as modules were formed and staged in the farmer's field, what ways, other than those listed in the question above, would you use the weight information in your operation? Please record the other ways you would use the weight information in your operation.

Gin ID	Comment
1	Comparison between the gin scales
2	It would be nice to compare the gin scales and help in determining the number of bales/module.
3	a. percent turnout, b. variety differences, if any c. what effect date picked and ginning date has on module: time between picking and ginning particularly on grades and turnout.
4	It would determine "WHICH" truck I would send, for example some trucks are (not) as heavy built, or as tall as others.
14	None for ginner. May be helpful for grower. Regarding weight variation; There is (250 pound) weight variation due to muddy trucks.
18	Scheduling
19	Estimated bales
22	If driver didn't have to get out of the truck (to bring module coupon to the gin office) it would improve efficiency.

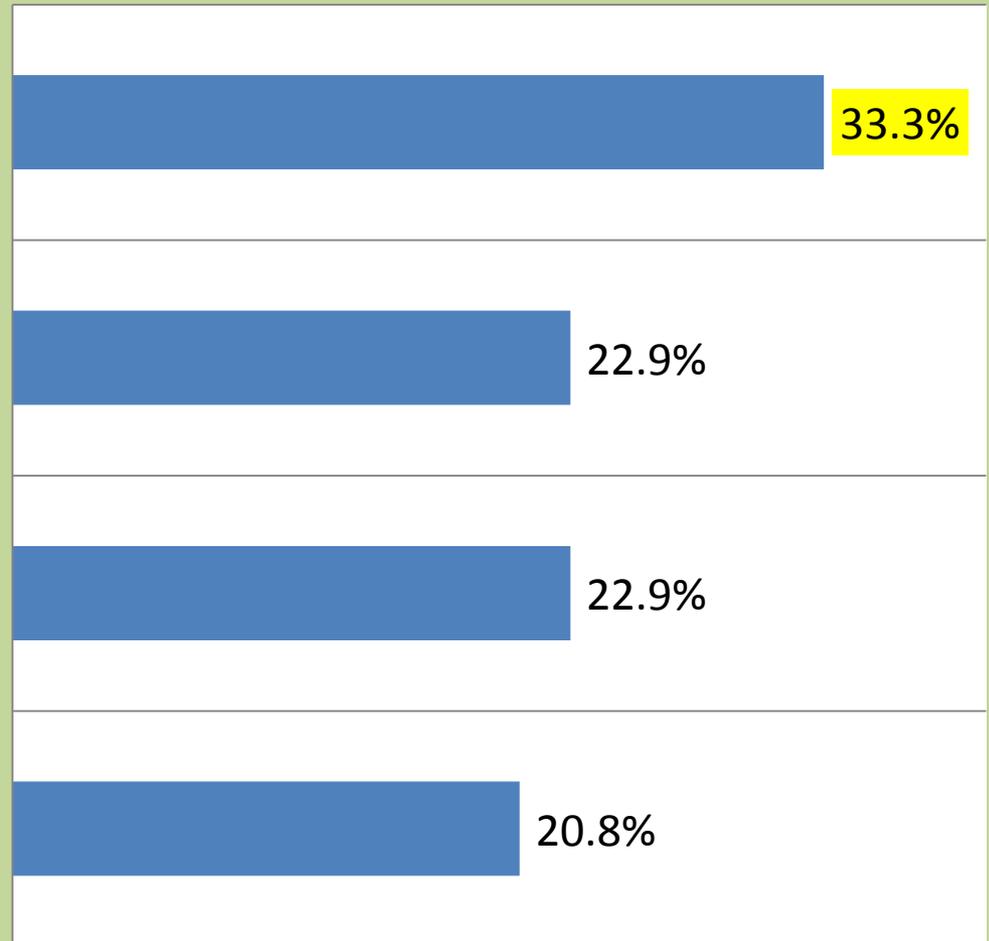
20. If you were able to know the module weight as modules were formed and staged in the farmer's field, what precision level would be the most helpful to your operation?

Plus or minus 50 pounds (about 1%)

Plus or minus 250 pounds (about 5%)

Plus or minus 500 pounds (about 10%)

Skipped question



21. If you could have cotton variety information associated with the module tag, how likely would you be to use the cotton variety information to do the following in your operation? For each action listed below (a through b), please place an 'X' under the column that best describes how likely you would be to use the cotton variety information to perform each action.

	Not at all likely	Some-what unlikely	Neither likely nor unlikely	Some-what likely	Very likely	Skipped question
a. I would use cotton variety information to reduce the need to enter variety information at the gin.	20.9%	4.7%	20.9%	32.6%	20.9%	14.0%
b. I would use the cotton variety information for gin setup.	26.1%	6.5%	17.4%	28.3%	19.6%	6.5%

23. How important would knowing the following fiber properties of seed cotton in modules be to your operation?

	Not at all important	Somewhat unimportant	Neither important nor unimportant	Somewhat important	Very important	Skipped question
a. Staple	27.1%	2.1%	25.0%	18.8%	22.9%	4.2%
b. Grade	22.9%	2.1%	25.0%	20.8%	25.0%	4.2%
c. Leaf	14.6%	0.0%	18.8%	29.2%	33.3%	4.2%
d. Color	29.2%	4.2%	25.0%	16.7%	20.8%	4.2%
e. Trash	16.7%	0.0%	14.6%	33.3%	31.3%	4.2%
f. Micronaire	31.3%	10.4%	27.1%	8.3%	18.8%	4.2%

Lint Contamination



CONTAMINATION FREE COTTON - KEEP IT CLEAN AND PURE

Contamination Free Cotton Bulletin

You may have read the "Striving for Zero Tolerance" article in *Cotton Farming* magazine (September 2012) or a contamination prevention alert that was sent to joint Cotton Industry Sale Packaging Committee (CISPC) members and others on August 13. Links to both pieces are on the ACC Quality Preservation web page. <http://www.cotton.org/tech/quality/index.cfm>. The referenced web page contains links to material designed for one purpose: to help focus cotton industry resources on the importance of preventing lint contamination. Everyone who works with cotton has a stake in contamination prevention.

Guidelines for Cotton Growers

- **Pre-Harvest:**
 - Create a suitable foreign materials watch list.
 - Practice the practices, such as irrigation water filters and plant available debris (e.g. chipping bags, residues of stubble or other fields).
 - Clean or cull machines.
 - Other (i.e., accumulated leaf, soil, dust, debris, etc.).
 - Inspect fields for materials that could be picked up by harvesting equipment and remove them.
 - The roughly clean and, if necessary, power wash harvesting equipment.
- **Harvest:**
 - Custom harvest areas and other field workers must understand the consequences of allowing harvesting equipment to pick up foreign material from foreign materials watch list areas.
 - Inspect harvesting equipment daily to ensure that the equipment is not an inadvertent source of foreign material (i.e., are there hydraulic leaks or grease in areas that come in contact with seed cotton, and inspections reveal foreign materials on other operators or harrow rollers, etc.).
 - Do not use machinery in such a manner that creates potential contamination that will be picked up with the material.
 - Do a wet area or fluid residue in standing or dispersed areas.
 - Use a method to identify material that do not require the making of seed cotton.

Guidelines for Cotton Gins

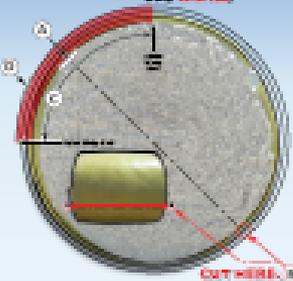
- **Pre-harvest:**
 - Inspect permits for foreign materials and remove any.
 - Clean areas (in and around module houses) of all debris from the previous ginning season and all season residue.
 - Remove module storage yards as needed to make sure they are not a source of potential contamination.
 - Take gins areas on site strategies for removing and inspecting module covers and wings.
 - Double check hydraulic equipment with a special emphasis on hydraulic leaks, connections, couplings and pumpers leading to leaks that might contaminate lint.
- **Harvest:**
 - Monitor module moving equipment to make sure it is not picking up other attachments or not causing seed cotton contamination from a storage module cover and wings.
 - Monitor module storage yards to make sure situations do not develop that could cause contamination.
 - Make sure module covers and wings are completely removed prior to ginning.
 - Frequently inspect the area in and around the module house for foreign matter.
 - To safeguard against when removing potential contaminants from machinery, do a pre-gin check to make sure a clean of regular work in the gin, until the job is complete.
 - Avoid using machinery that may result in the redistribution of residual foreign materials back into the lint stream.
 - Make sure all areas are clean and edged that seed cotton and lint stream do not return to the gin.
 - Make sure the gins are in compliance in the practice of labeling lint and reporting foreign materials in seed cotton and lint to their supervisor.

Guidelines for Cotton Warehouses

- **Pre-Harvest:**
 - Make sure all storage buildings, sheds and equipment that are used for storage of seed cotton before or after and free of foreign materials, grass, soil, etc.
 - Make sure the hydraulic systems on lifts and other equipment are in proper working order (no leaks, hoses, flaps, etc.).
- **Harvest:**
 - Inspect before an arrival and let gins know when specific lint samples are taken and found to be a problem.
 - Use unloading, moving, stacking and loading equipment that do not result in damage to lint including materials on lint.
 - Maintain a facility that is clean and use equipment that is maintained in a manner that ensures lint is not contaminated in any way.
 - Refer to "5 Guide for Cotton Sale Standards" for additional information as necessary, generally as applicable lint conditions.

IMPORTANT!

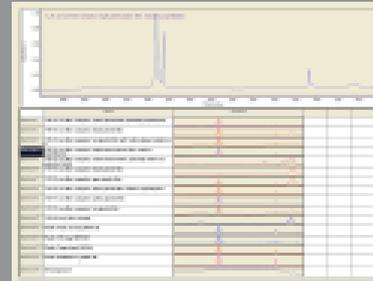
Wash removed contaminants...
 1. Wash removed contaminants...
 2. Wash removed contaminants...
 3. Wash removed contaminants...
 4. Wash removed contaminants...
 5. Wash removed contaminants...
 6. Wash removed contaminants...
 7. Wash removed contaminants...
 8. Wash removed contaminants...
 9. Wash removed contaminants...
 10. Wash removed contaminants...



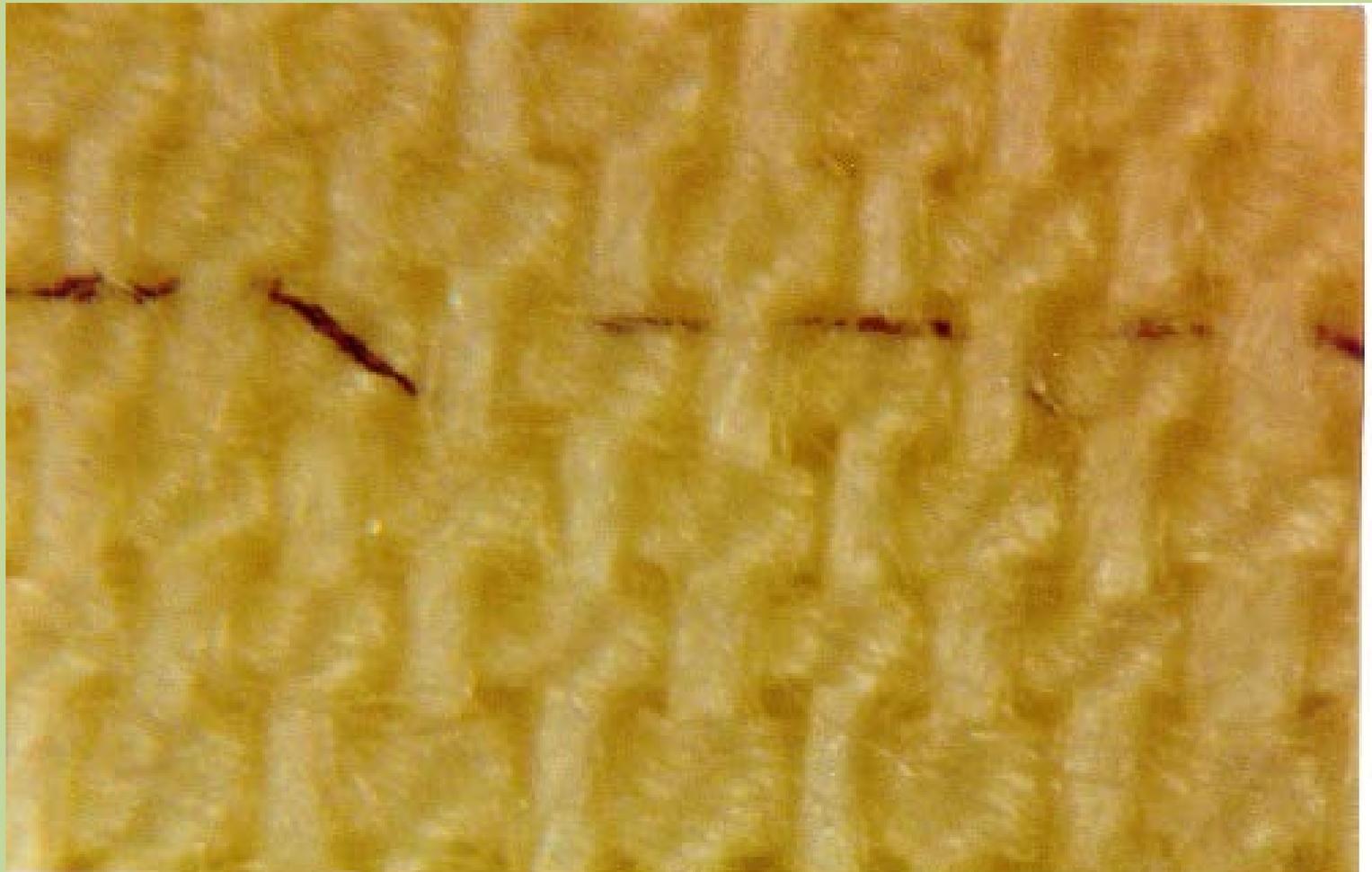
Post-harvest Guidelines for All Groups

- Review contamination prevention programs and determine if acceptable results were achieved.
- If deficiencies are revealed during the review, determine what actions are needed to strengthen contamination prevention programs in the future.
- Update foreign materials watch list.

These are just a few of the steps we can take to prevent concerns over potential contamination events. The battle to prevent contamination never ends and that is why consistent efforts are needed by everyone with a stake in contamination free cotton. Those efforts are warranted in order to satisfy U.S. cotton's mill customers need for pure lint and to maintain U.S. cotton's global reputation for contamination-free lint.



Contaminant in Cotton Fabric





04/20/24

**The knitter believes this
contamination could be**



hydraulic oil



Poly-pipe



Fiber quality preservation begins in the field.

COTTON
100% natural
Let's keep it that way

Remove plastics and trash from fields before harvest.

Keep plastics out of harvester heads.

Remove all covers and tie downs before ginning.

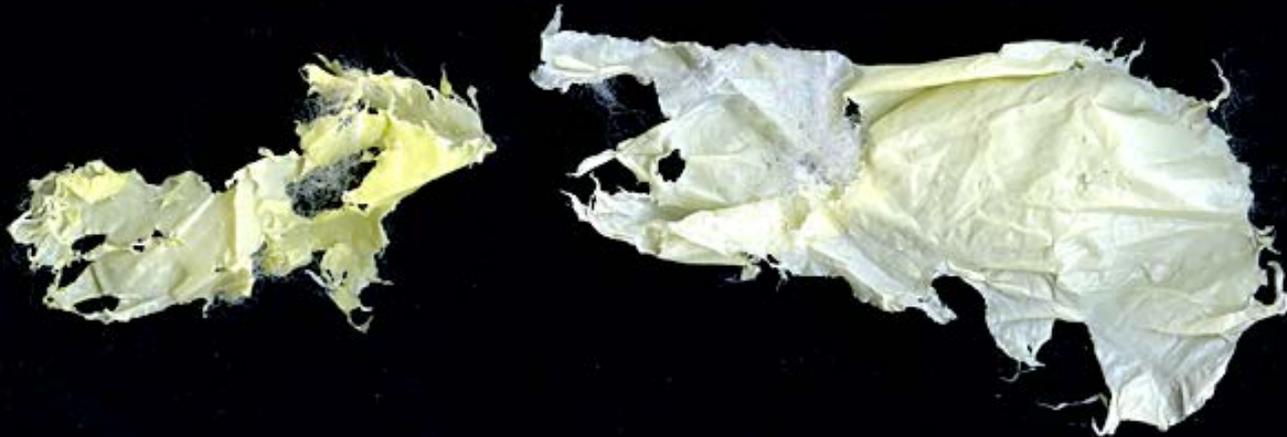
Your actions prevent contaminants as seen here.

CONTAMINATION CHECK POINT
WARNING: LOCK OUT

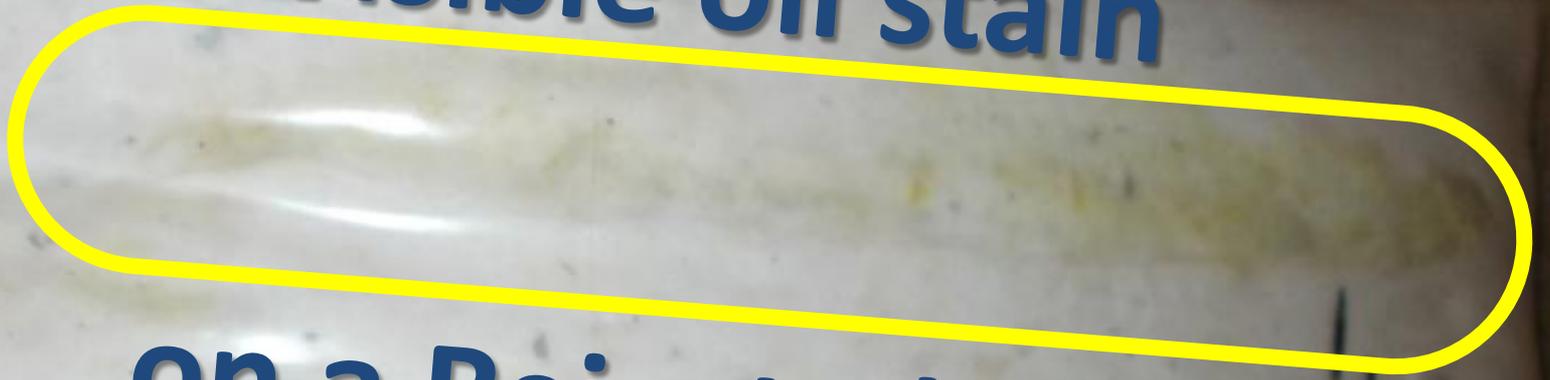
REMOVE CONTAMINANTS!

National Cotton Council of America
Southern Cotton Ginners Foundation
The Cotton Foundation

Clear and Light Colored “Thick” (+/-6 mil) Plastic Films in Slide 3



Visible oil stain



on a Rejected Bale

2365



