

# Survey of Control Officials on Slow and Controlled Release Fertilizers

James Bartos

Office of Indiana State Chemist

# Why a Survey?

- Improve efficiency
  - In spite of **considerable** time and effort, progress by SR committee has been limited
  - Don't want progress made by SR committee to stall at next levels (i.e. *Terms and Definition* or *Model Bills* committees)
  - SR committee is in *Lab Group* section, so need some guidance from state fertilizer administrators
- Identify where we can move forward and where work remains to be done
- Identify where we have adequate knowledge, and areas we may need more information/education
- Control officials surveyed only, but should help industry know where we are focusing our efforts and potential future trends

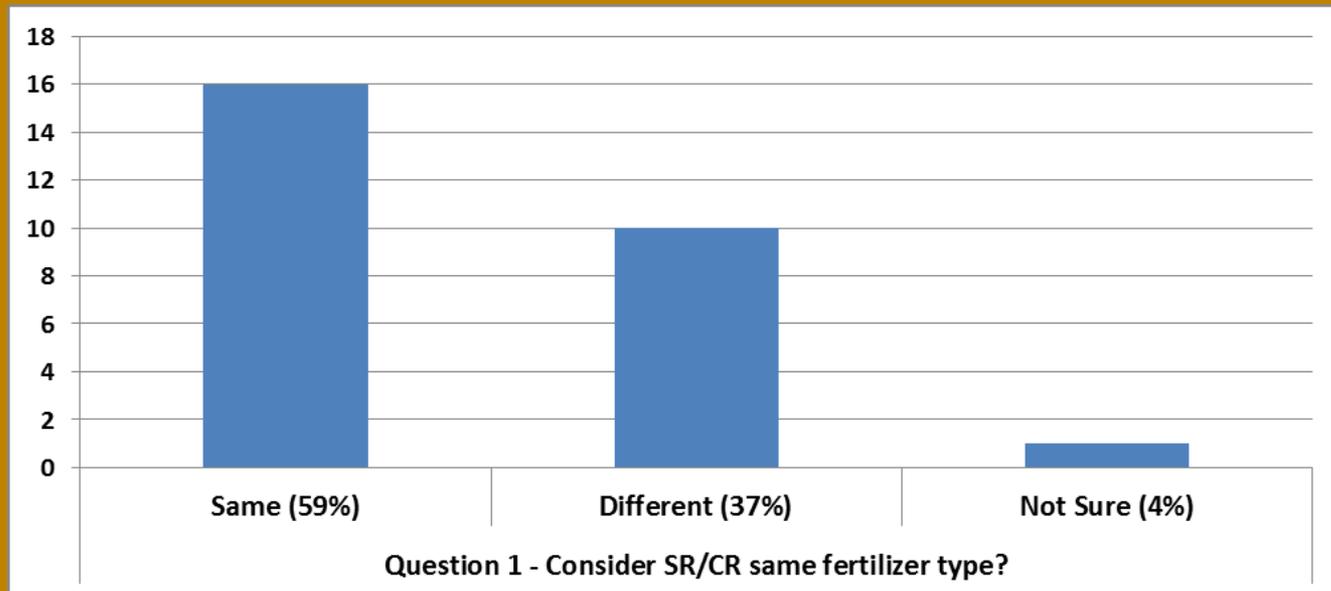
# Background

- 17 questions
- Multiple choice answers with several selections
- Comment sections for clarification
- 27 state control officials and ***Canadian Food Inspection Agency*** responded
  - States: **AR, CA, CO, CT, FL, IA, IN, KS, KY, MD, ME, MI, MN, MS, MT, NH, NJ, NM, NY, OH, OK, OR, PA, SD, TX** and **WA**.
- Questions and responses are provided
- Limited interpretation at this time

# Question 1:

**Do you currently consider Slow and Controlled Release fertilizers to essentially be the same, or are they different enough to be considered as two separate types of fertilizers?**

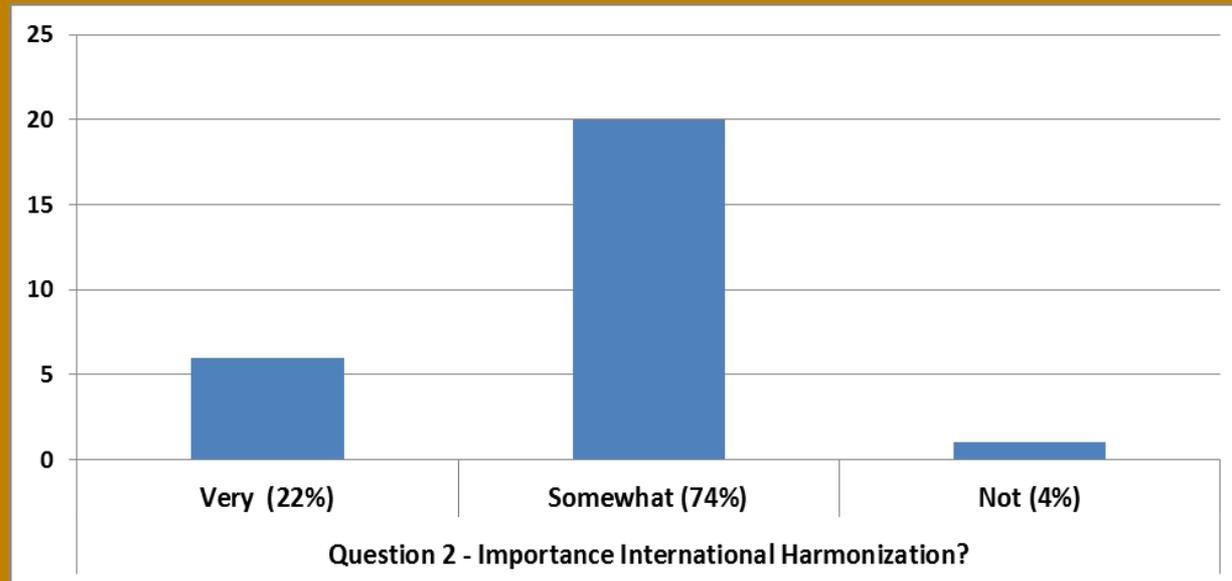
- a. consider them to be the same:
- b. consider them to be different:
- c. not sure:



# Question 2:

**Internationally, Slow and Controlled Release fertilizer terms are separated. How important should global harmonization efforts be when creating or modifying a term?**

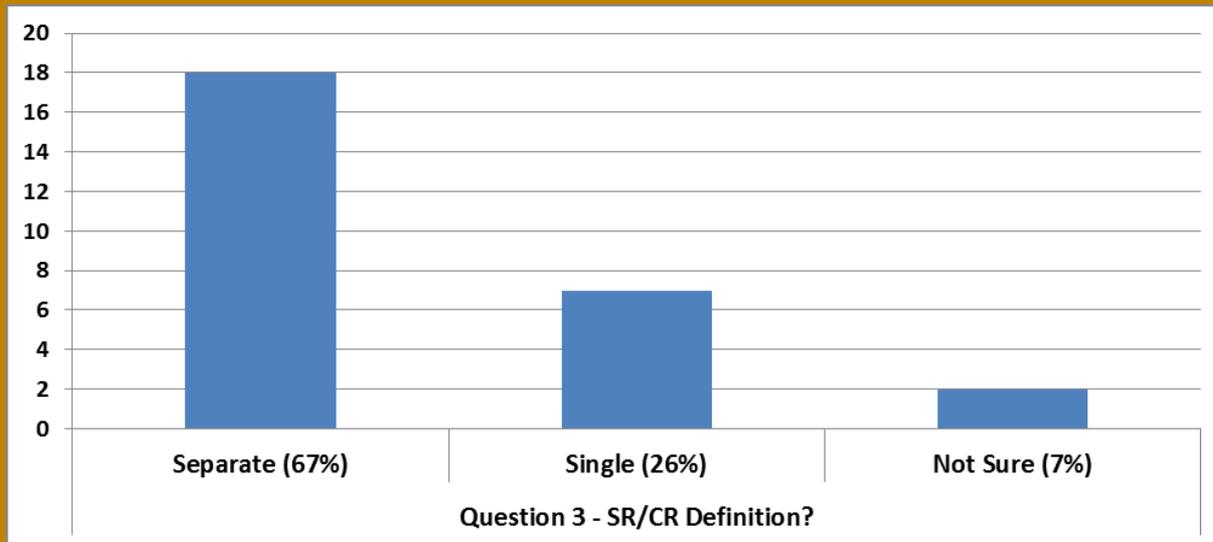
- a. very important:
- b. somewhat important:
- c. not very important:



# Question 3:

**Going forward, should Slow Release and Controlled Release fertilizers have separate terms/definitions?**

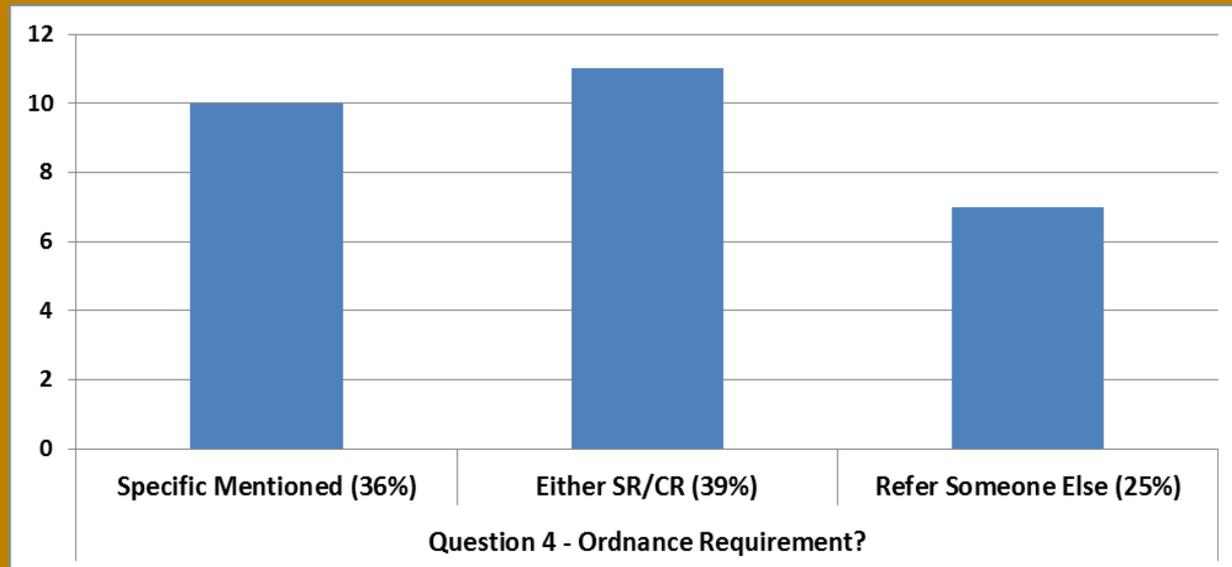
- a. yes, Slow and Controlled Release fertilizer should have separate definitions:
- b. no, Slow and Controlled Release fertilizer should have a single definition:
- c. not sure:



# Question 4:

If a local (or regional, or national) rule or ordinance specifically mentions the use of a *Controlled Release Fertilizer* or conversely specifically mentions for the use of a *Slow Release Fertilizer*, if you were contacted as an expert on this subject matter as an AAPFCO member, would you recommend:

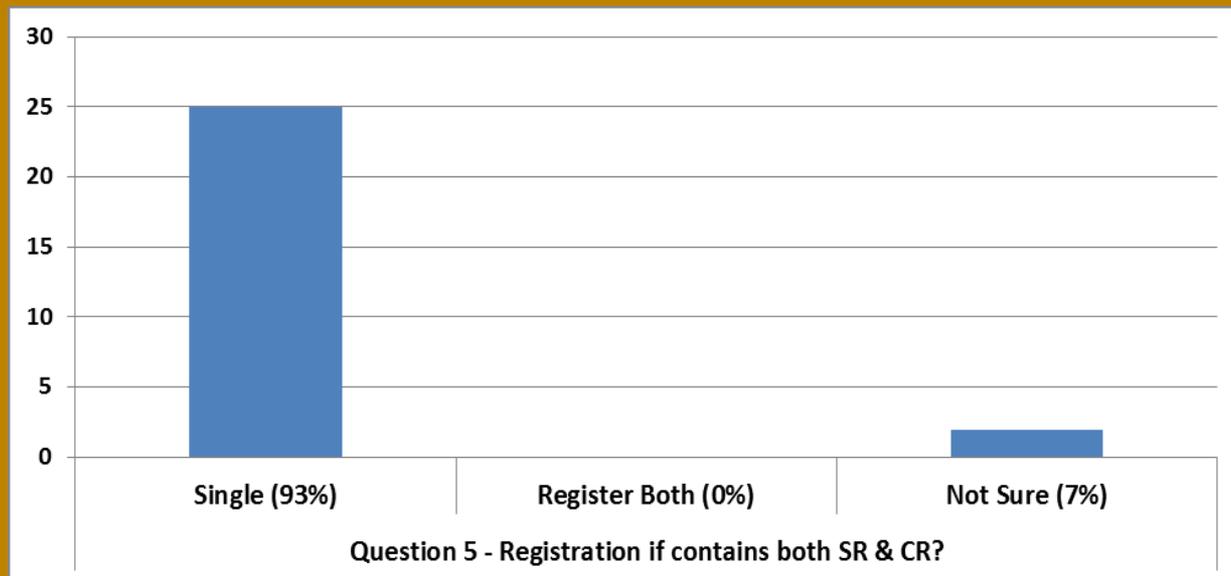
- a. they use the specific type of fertilizer mentioned in the ordinance/rule:
- b. they could use either a Slow or a Controlled Release product:
- c. tell them you are not sure and refer them to someone else:



# Question 5:

**If a product contains both Slow and Controlled Release materials, does the product need to be registered as both a Slow and as a Controlled Release fertilizer, or could the product get by with a single registration?**

- a. a single registration would be fine:
- b. should be registered as both a Slow and as a Controlled Release fertilizer:
- c. not sure:



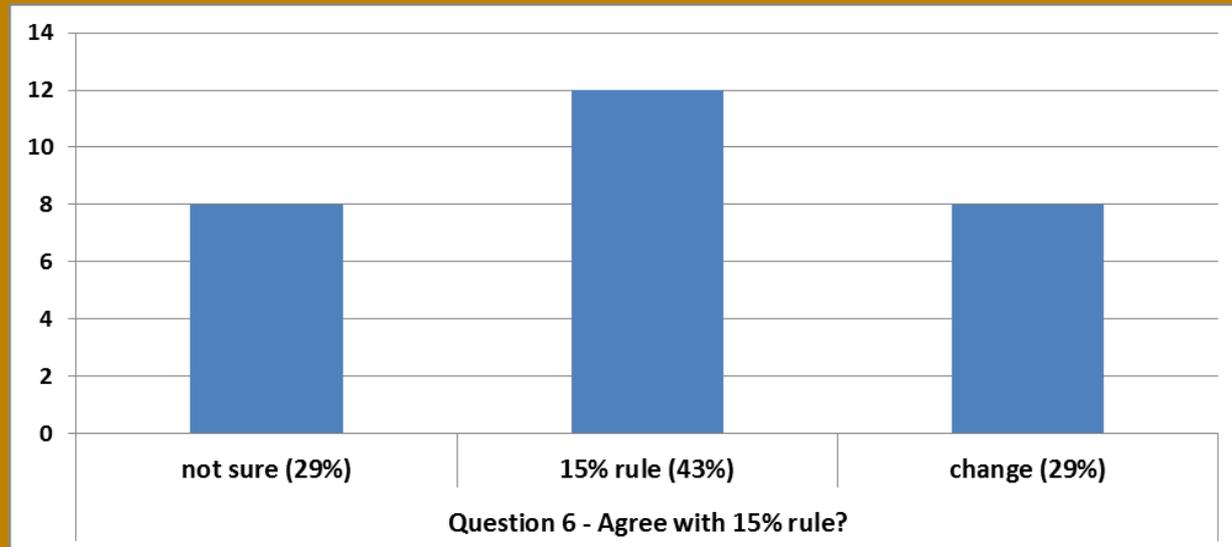
# Question 6:

Rule 3 (AAPFCO OP No. 69 page 47) requires that 15% of the total guarantee (for each nutrient) must be “*released slowly over a period of time*” to be classified as a Slow (or Controlled) Release fertilizer. Is this number about right, or should it be changed?

- a. not sure:
- b. agree with 15% rule:
- c. think this percentage should be changed:

***If you selected c., \_\_\_\_\_ % of the total nutrient should be SR/CR?***

***note: it is difficult or impossible to achieve > than 80-90% SR/CR***



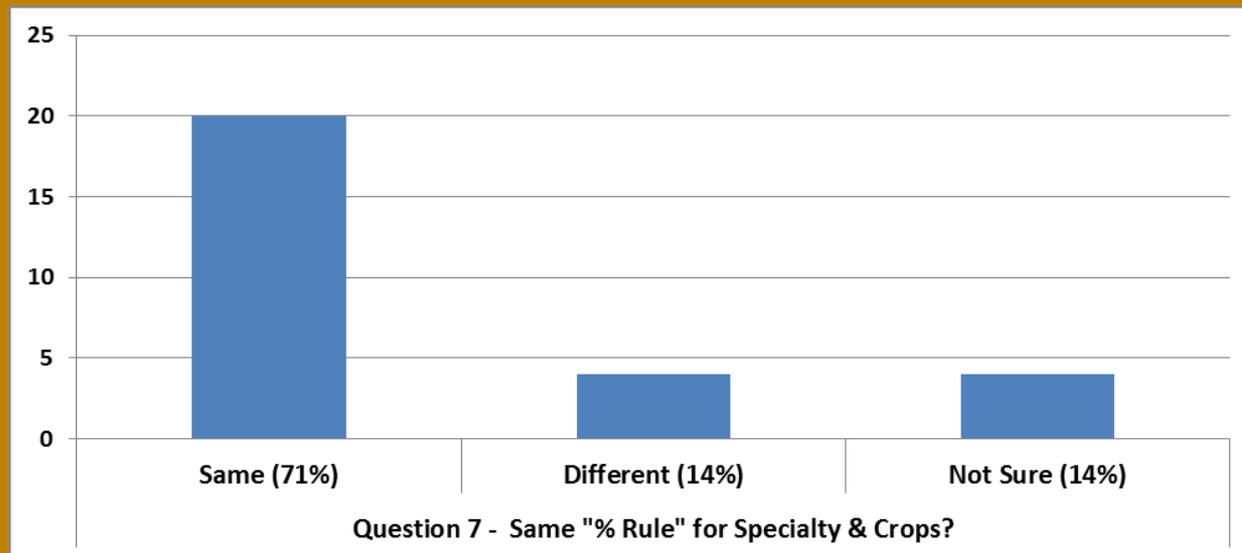
# Question 6 (comments):

- $\geq 50\%$ , open to higher, but 15% too low to be meaningful
- 30%
- $\geq 50\%$
- 50%
- 51%
- 25%
- 20%
- 30 – 50%, where did the 15% come from? If product contains “some” SR and/or CR nutrients, then 15% is appropriate; however, if it claims to be [only] a SR or CR product, than this should have a higher standard, and I would say at least 50% should be required.

# Question 7:

**Should the percentage of the total guarantee that must be slow or controlled release (e.g. 15% rule) be the same for lawn/specialty fertilizers and for agricultural fertilizers?**

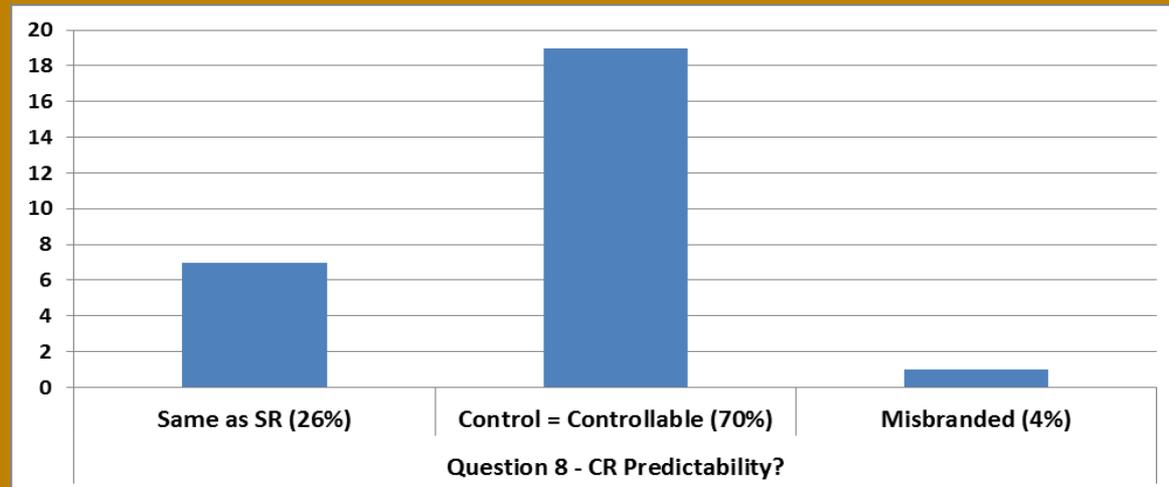
- a. yes, the percentage requirement of the total nutrient that must be slow or controlled should be the same for specialty and agricultural fertilizers:
- b. no, specialty fertilizers for lawns/turf/ornamentals and agricultural fertilizes should not be required to have the same minimum percentage of slow/controlled fertilizer:
- c. not sure:



# Question 8:

There is an understanding or assumption by some, that Controlled Release fertilizers can better “control” or predict their nutrient release than Slow Release fertilizers. Which of the following statements best summarizes your opinion:

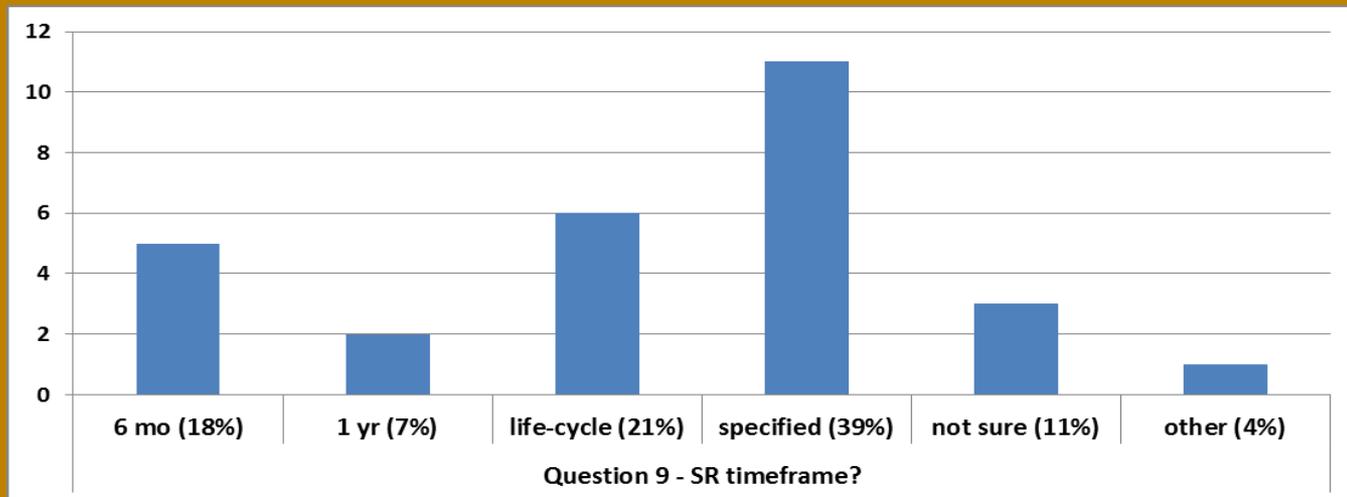
- a. Controlled release fertilizers cannot predict their nutrient release any better than slow release fertilizers, so only general longevity statements can be made on the label:
- b. Controlled implies “controllable” release, so some predictable limits (such as a longevity statement) should be required on the label:
- c. If nutrient release can’t be “controlled,” then the product is misbranded/mislabeled:



# Question 9:

If a product claims to be Slow Release, within what approximate time frame should the majority of the product be released (*note some products claiming to be Slow Release may take years to fully release*)?

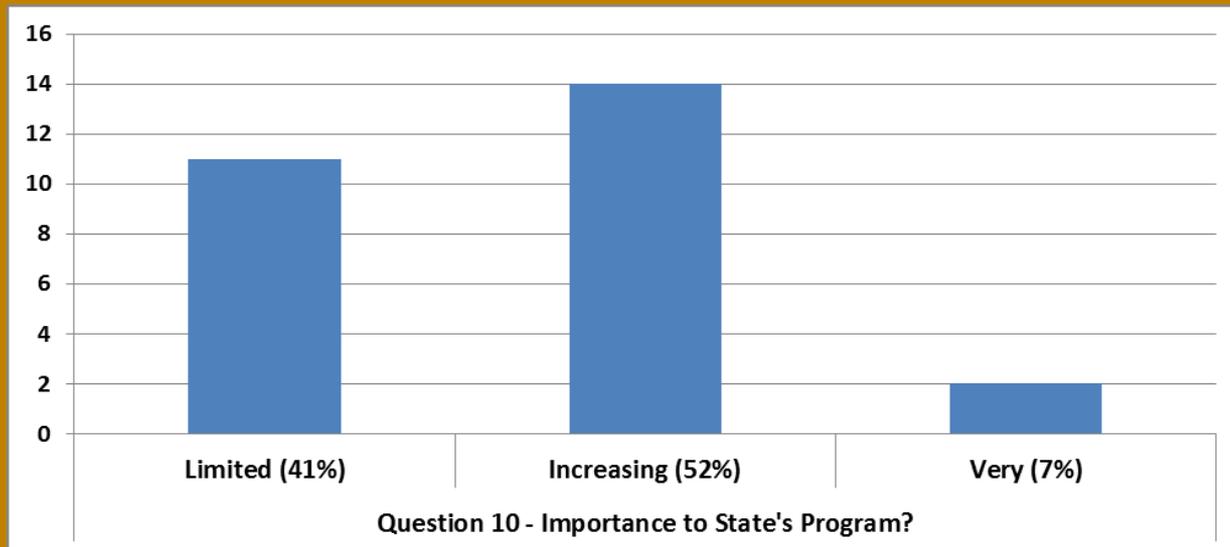
- a. the majority should be released within 180 days (6 mo):
- b. the majority should be released within 365 days (12 mo):
- c. the majority should be released within the “life-cycle” of the plant it is being applied to:
- d. the manufacturer should specify and provide general supporting data of their product’s release quantity/time (*under some TBD set of standard conditions*):
- e. not sure:
- f. none of the above: I recommend: \_\_\_\_\_



# Question 10:

**How important are Enhanced Efficiency Fertilizer regulations to your state's regulatory program?**

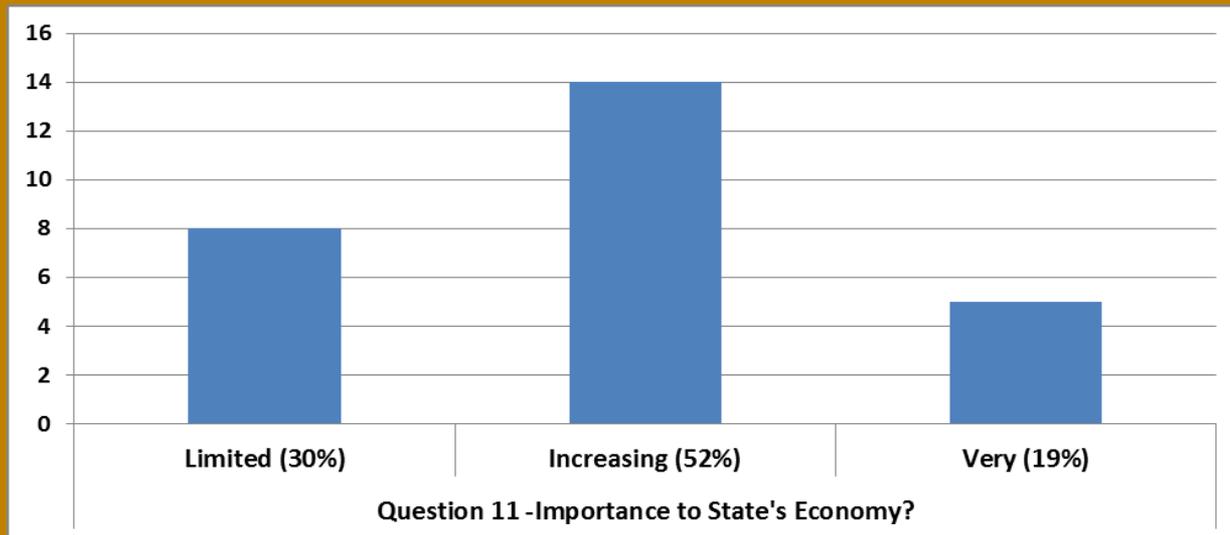
- a. limited in number/use, not that important:
- b. growing in importance, anticipate increased use/sampling:
- c. very important, will continue to monitor closely:



# Question 11:

**How important are Slow/Controlled/Enhanced Efficiency fertilizers to your state's economy?**

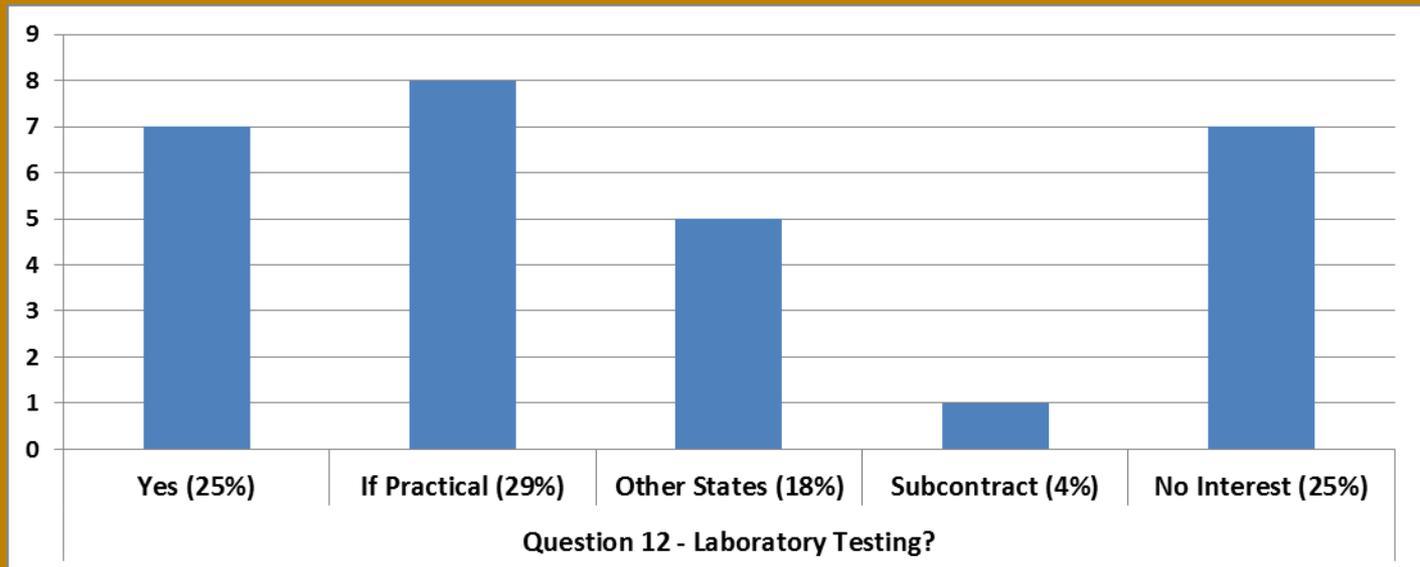
- a. limited in number/use, not that important:
- b. growing in importance, anticipate increased use:
- c. very important, will continue to grow:



# Question 12:

**As laboratory test methods become available, which best describes your situation:**

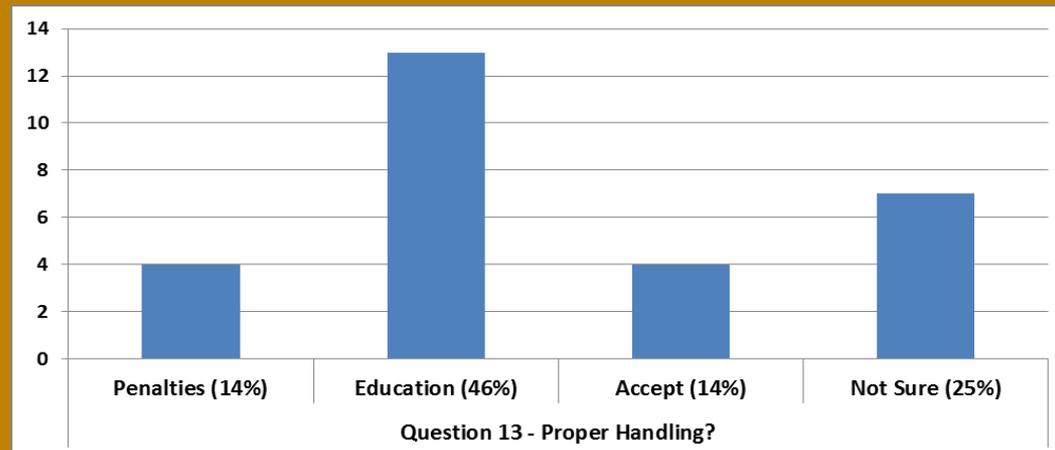
- a. to the best of our ability, we will acquire the resources to implement these tests:
- b. we will implement these tests only if they are practical and/or relatively quick:
- c. at this time, we have no interest in pursuing test methods for these products, but will consult with those State labs that have method analyses capabilities:
- d. if the tests are time consuming or complicated, we would likely subcontract them to another laboratory:
- e. we have no interest in pursuing test methods for these products at this time:



# Question 13:

If not properly managed, some of these materials can be compromised. For example, coatings can be damaged during transport, loading or blending. Is this something that state control officials should be concern with?

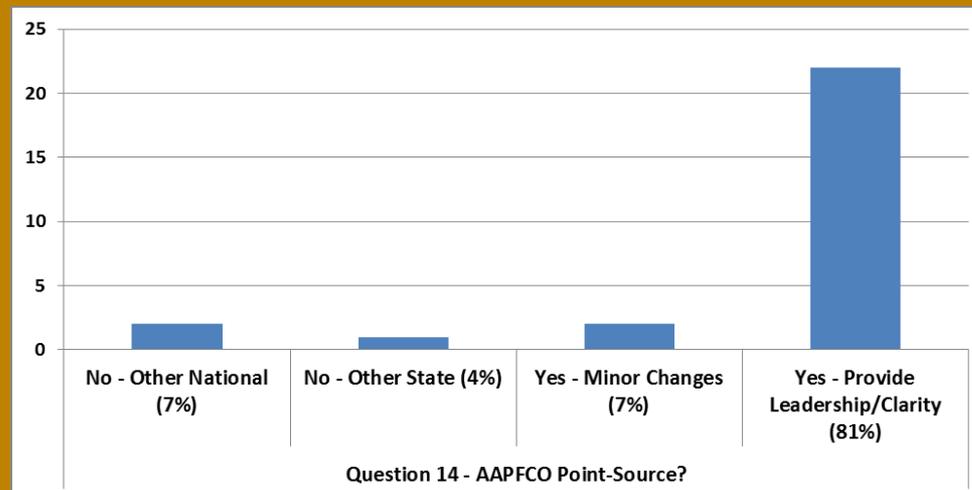
- a. yes, and penalties will be assessed if the product is damaged and does not meet claims:
- b. yes, but we should pursue educational efforts to improve problems before taking strong regulatory actions:
- c. no, we understand that this is part of the nature of these products, so we accept that this may happen during the handling of these materials:
- d. not sure:



# Question 14:

AAPFCO has been identified as “the point-source” for information on EEF, which includes SR, CR and stabilized fertilizers, and therefore is often tasked with providing greater clarification on these matters. Which of the following best describes your opinion:

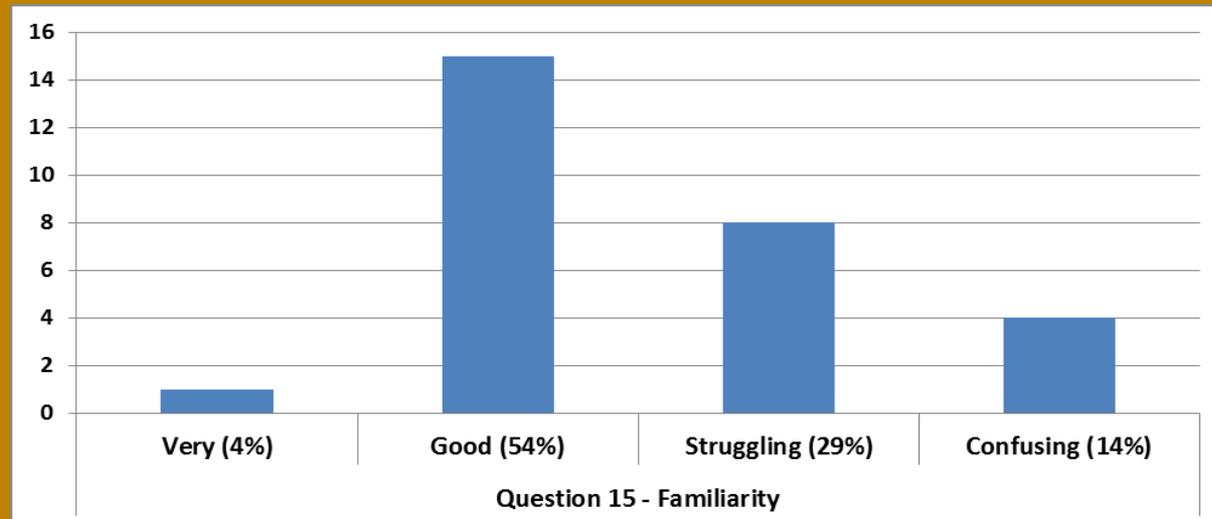
- a. we have limited time/expertise in this area and this responsibility would be best suited to another national organization:
- b. we have limited time/expertise in this area and this responsibility would be best suited to another of our state agencies/organizations:
- c. we [AAPFCO] has done an adequate job in this area, and only minor changes or improvements are needed:
- d. this is a highly visible and growing area of interest/regulation and AAPFCO needs to accept this responsibility and do what is necessary to provide leadership and clarity:



# Question 15:

**How would you describe your offices familiarity with SR/CR/EEF products?**

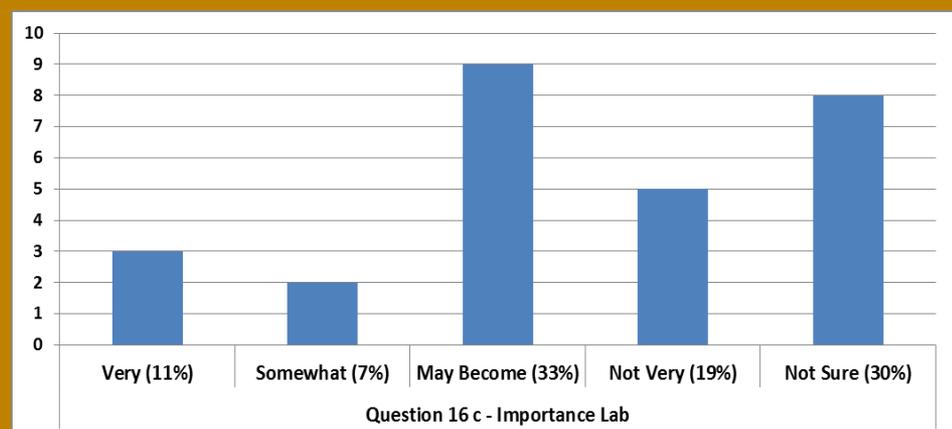
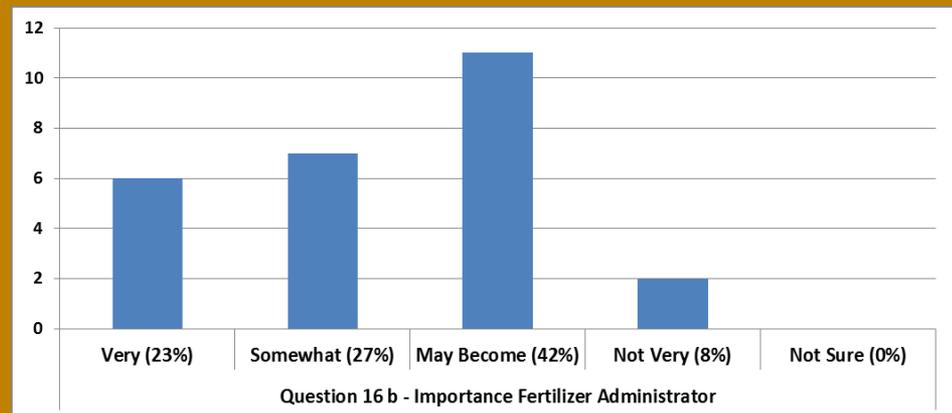
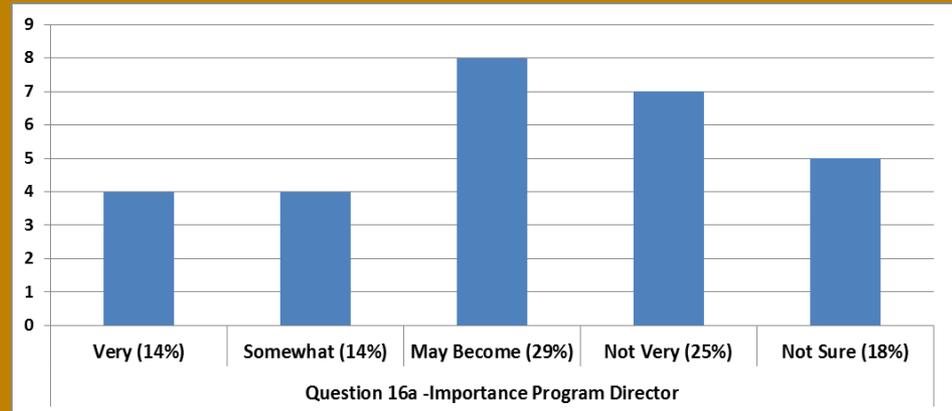
- a. we are quite comfortable with our knowledge of these products and have access to sufficient reference materials and resources:
- b. we have a pretty good understanding of these products and generally know where to go to find additional information:
- c. we are struggling to understand these products and feel information through AAPFCO and other organizations is limited:
- d. these products are very confusing to us and limits our ability to adequately regulate them:



# Question 16

Please estimate your states interest level in SR, CR and EEF by the following audience:

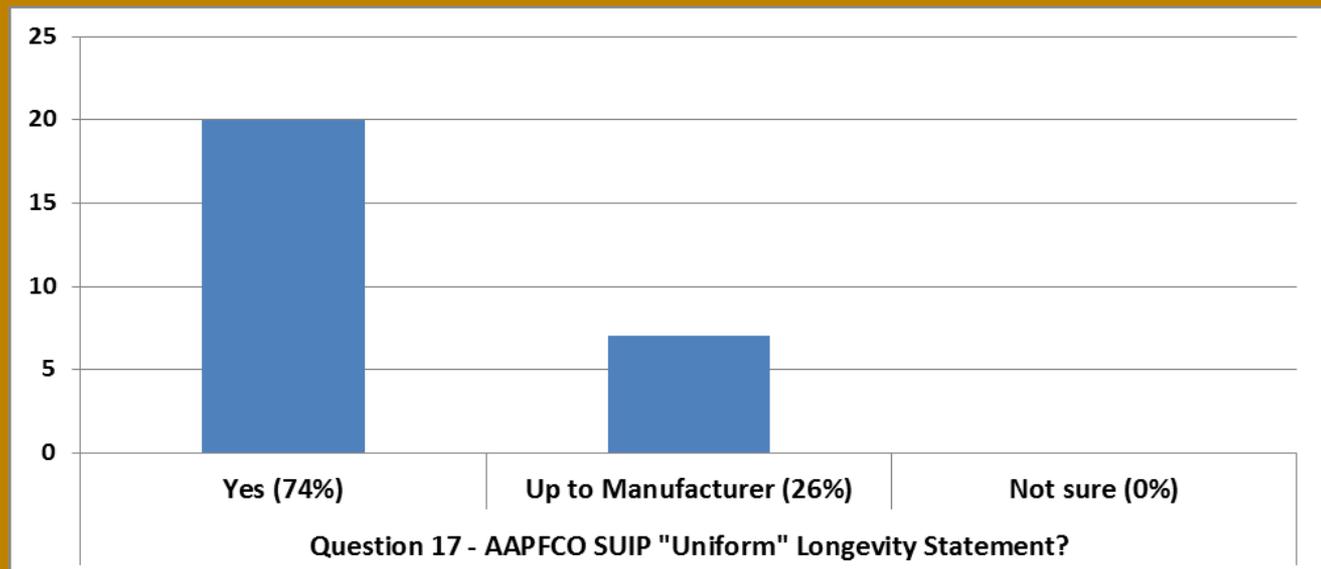
- a. *Program Director*
- b. *Fertilizer Administrator*
- c. *Laboratory*



# Question 17:

**Should the AAPFCO Slow Release committee pursue a policy or SUIP regarding longevity claim requirements?**

- a. yes, I would prefer some uniformity among products and states when it comes to longevity claims:
- b. no, the manufacturer should have the right to make whatever claim they would like, as long as the claim can be substantiated:
- c. not sure:



# Additional Comments Offered

- Can we extrapolate from any existing international work or definitions?
- We would prefer to see scientific data to propose an increase in the 15% rule. What is the rationale for the current 15% rule?
- We need more information before we can make an assessment on question 13 (proper handling of materials).
- AAPFCO should set the parameters for when a product can be considered controlled or slow release.
- Our state requires 20% SR nitrogen if the company claims they have a slow release product.
- [Many] agronomic crops grow rapidly in one season, whereas lawns don't. It seems that Ag crops would have different fertilization requirements. We need input from agronomists.

# Additional Comments Offered

- As we move forward with these products, I would like to implement changes in our statute to create uniformity with other states.
- From a regulatory view, SR and CR are considered the same, as long as they release less than soluble fertilizer. The regulatory goal is to prevent the sudden loss of nutrient creating a potential contamination source.
- Our state has a regulation on SR Nitrogen; however, the regulation does not specify any method.
- CR and SR should initially focus on Nitrogen due to its relatively high content in fertilizers and its hazard potential. As our experience grows with N, then we can extrapolate to other nutrients.
- I feel CR is a “premium” type of SR.

# Additional Comments Offered

- In regards to ordnances, if it specifically said SR, then CR would be ok, but if it said CR then SR would not be ok.
- Believe 15% rule is mainly looking at N. Believe rule is ok if fertilizer contains “some” SR/CR, but if fertilizer is exclusively an SR or CR product, then I would say it should be raised to a higher standard of at least 50%.
- To continue this work, are there other portions than need to be sent off to other committee? Uniform Bill could identify all the places in the model bill that would be affected by the definition change. Terms and Definitions could work out term issues. There may even be a task for the BMP committee. All while SR works on longevity statements and other items. The SR committee needs to ask for help and give the other committees some direction.

# Summary

- Some useful information has been collected that will help us proceed.
  - Some areas seem pretty clear, while others need work
- Where consensus by control officials is demonstrated, do we have direction to proceed accordingly(?)
- Where consensus is not demonstrated, what is the best course-of-action?
- Interpretation and direction?
  - Sub working group of ~10 people, half regulatory/half industry help identify action/focus items and report to committee(s)?

# Summary

- Need to continue to engage control officials to obtain consensus and limit the return of items back to SR committee
  - *Fertilizer Administrators Seminar*
  - *AAPFCO control officials closed session*
  - *Googlegroup listserve*
- Agreement that AAPFCO has and should accept their role as point source on these matters
- Much work yet to do, but may have a clearer path moving forward