

**Industry Interview Script**

**Herbicide-Resistance in Turf Systems: Insights and Options  
for Managing Complexity**

**Structure**

- Introduce the project, its purposes and components
- Describe the purposes of the interviews:
  - Anonymous and non-attribution – will not be identified as source
  - Their perspectives are very important and hope they will be candid
  - No “wrong” comments - not looking for the right answer – here to learn from your experience
  - Will be audio recording for purposes of being able to check back on details but all reported responses will remain anonymous.

**INTRO:**

- Briefly introduce yourself and describe what services are delivered from your company. Please also describe your professional career in this field and your “role” in the company. What regions do you cover and which turf sectors do you primarily serve?
- Have you encountered a situation where there are weeds that affect your customer’s operations **that are suspected to have already developed suspected resistance** to common herbicides?
  - If so, which ones and what were the indications of resistance?
- Are there weeds that you are concerned **may develop** resistance to common herbicides used in your customers’ operations?
  - If so, which ones, and why are you concerned?
- Do turf producers or managers turn to you for **information and assistance** in identifying and managing potential HR resistant weeds?
- If so, what kinds of guidance and assistance do you usually provide?
- When offering such guidance or assistance, do you tend to rely on your expertise and experience?
- Do you consult others in your company or use research/outreach tools from academic professionals, trade associations or others (who)?

**SCENARIOS**

I’m going to offer you some **scenarios** and I’m interested in hearing how you think each scenario should be approached.

### Scenario 1:

Let's imagine that a turf producer or manager, or other customer of yours finds a **weed** in their operation that they suspect may be resistant to the primary herbicide or herbicides being used to control it.

- What should you recommend the producer/manager do to respond to this situation?
- Why should he/she do this?
- How might a resistant weed have been introduced into this operation?
- What tools/practices do you think are most important in combatting resistant weeds in turf management and production?

Possible probes/follow up (if do not bring these up):

- What are your thoughts regarding pre vs. post applications, timing, mode of action (MOA) rotation, application methods, and other measures to control the evolution of herbicide resistant weeds?
- When you are advising your customers, do you ever recommend "integrated weed management" approaches that combine chemical with cultural and mechanical practices? If so, please give examples.
- What are your views on the utility of non-chemical practices for helping manage herbicide resistant weeds? Any observations regarding their effectiveness, cost or benefits?
- What percentage of your best practice recommendations is usually adopted by your clients? For chemical practices? For non-chemical approaches?
- What do you think the biggest challenges, barriers or impediments to a sod producer/turf manager in implementing the tools/practices you think are most useful to prevent or control herbicide resistance?
- Do you think 'early order' programs that encourage turf managers to commit to use selected herbicides to obtain discounts may affect managers' receptivity to more diverse weed management practices in turf systems?

### Scenario 2:

Let's assume one of your customers learns that a **neighboring property has** herbicide resistant weeds **OR** that neighboring producers or managers rely **on seed or other input supply sources** that may deliver inputs or products carrying herbicide resistant weeds.

- What do you think should the producer or manager should do to respond to this situation?
- Why should he or she do this?

- If your recommended management approaches differ from a scenario in which the herbicide resistant weeds occur only on the producer or manager's own fields/plots, why is that?
- What kinds of actions by sod producers or turf managers (or other) cause herbicide resistant weeds to infest neighbors' fields or operations?
  - Probe possible role of equipment sharing
- Are there cooperative approaches for cases like this that you think might be useful and effective in managing herbicide resistant weeds in turf systems?
  - If so, what might such an approach look like?
    - Do you think such an approach is possible?
    - What might be some challenges to such an approach?
    - What might be some of the benefits?
  - What role(s) might you or your firm play in implementing a cooperative approach.

**General Follow up Questions:**

1. Based on your experience in the industry, what would you argue is the primary cause of herbicide resistance in turfgrass systems?
2. Which key actors need to be involved in addressing herbicide resistant weed challenges in turf sectors?
  - a. For example - Sod producers, turf managers, chemical companies, government agencies, universities, or others?
  - b. Is there a "top three" of these that need to be involved?
3. What are the prime areas of expertise and responsibility that industry partners have in managing herbicide resistance?
4. Do you think herbicide resistance in weeds is a short-term or long-term problem?

**Wrap Up**

- What was the most important observation from today's conversation?
- Are there questions I did not ask that I should have? Was anything missing from our conversation?