



CROP ALERT

October 11, 2013

From Bill Verbeten and Mike Stanyard:

Toxic Fumes in Manure Lagoons from Gypsum Bedding

Toxic hydrogen sulfide (H₂S) fumes were detected during agitation of a manure lagoon on a farm that used recycled drywall for bedding in the region. These fumes are deadly to people and livestock and form when gypsum is mixed with manure and stored under anaerobic conditions. The use of gypsum bedding is banned in the United Kingdom because of this risk. According to Wikipedia, "Hydrogen sulfide ... is a colorless gas with the characteristic foul odor of rotten eggs; it is heavier than air, very poisonous, corrosive, flammable and explosive." A factsheet with more information on this topic will be posted to www.nwnyteam.org next week.

Planting Small Grains in October

With the delayed soybean harvest the planting of winter wheat, winter triticale, winter barley, and winter rye has been and continues to be late across western New York. These grains can still be planted in October, however they will produce little above ground growth prior to the winter. Applying high amounts of nitrogen in the spring split over two or three applications will still result in yields comparable to earlier planted wheat fields. However spring forage yields will only be about 2 tons DM/acre (about 5-6 as fed/acre) for October planted small grains compared to 3-4 tons DM for early September plantings. Temperatures across the region will be ideal for planting these grains this coming week reaching the mid 60s. Planting with a drill and increasing the seeding rate are vital for successful late season planting. Seeding rates should also be adjusted based on soil conditions, *Table 1*.

Table 1: Winter Wheat Seeding Rates

| Soil Conditions | Sept. 15 | Sept. 25 | Oct. 5 | Oct. 15 | Oct. 25 |
|-----------------|----------|----------|--------|---------|---------|
| Good | 1.33M | 1.45M | 1.57M | 1.69M | 1.8M |
| Average | 1.45M | 1.57M | 1.69M | 1.8M | 1.93M |
| Poor | 1.57M | 1.69M | 1.8M | 1.93M | 2.06M |

Seeding rates are millions of seeds per acre.

Source: Ag Focus September 2013.

Seeds should be drilled 1-1.5 inches deep for good emergence. See examples below on how to calculate million/pounds of seed per acre.

Live seed % = Recommended rate / Percentage of live seed = Rate/acre

Example: 1,350,000 seeds / .90 live seeds = 1.48 million seeds/acre

To figure out how many pounds per acre, use the following formula.

Seeds per acre / # seeds/lb. = lb./acre

Example: 1,450,000 / 13,000 = 111.5 lb./acre

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Starter Fertilizer. At the 2013 Soybean and Small Grains Congress, Peter Johnson emphasized that wheat should not be grown without a starter fertilizer. Yield losses of at least 8 bu/acre are common when starter fertilizer isn't used. He stressed that phosphorus was most important for wheat. He used the example that while soybeans only need 1 pound of P and corn 5 pounds for strong seedling establishment wheat needs 15 pounds. Follow soil sample recommendations and remember wheat grows best at a pH around 6.3. We have seen an increase in the number of fertilizer boxes and liquid applicators going on drills in recent years.

Fall Silage Harvests

Corn silage continues to be harvested throughout the region, especially in areas delayed by the continuing rain. Fourth (and in some cases 5th) cut haylage, oat silage, and sorghum-sudangrass silage have occurred and will continue through the end of October across western New York. While there have been a number of frosts that have stopped corn growth (and some of the sudangrass fields) it will take more severe frosts (low 20's) to stop the growth of all other silage plants. Drying will take longer under the cooler fall conditions. Chop and ensile these crops once the plants reach at least 30% DM and inoculate the haylage, small grain, and sudangrass silages with a *Lactobacillus* inoculant.

Osprey Herbicide Reminders from Danny Digiacomandrea, Bayer CropScience

Several questions have come up about using Osprey Herbicide in the fall. Our experience in NY so far is only with spring applications which have worked extremely well! Russ Hahn at Cornell has done some fall application research and so far spring applications have looked the best.

- Osprey labeled at 4.75 oz/acre on winter wheat only. Do not use on barley.
- Postemergence activity only, no residual
- Controls rough stalk blue grass and suppresses cheat (under [NY 24c Special Local Needs label](#) – Check the [federal label for more information](#)), good activity on chickweed and henbit
- Make timely applications. This will provide best control and is key to eliminating early weed competition. Research shows enormous yield benefits from early weed removal.
- Maximum label size of rough stalk bluegrass is 2 tillers
- Maximum label size of susceptible broadleaves is 2 inches tall
- Application prohibited once wheat has reached jointing stage
- Do not combine Osprey with liquid fertilizer application
- Do not top-dress liquid or dry within 14 days of Osprey application
- Must use an adjuvant

Application of OSPREY® Herbicide must include a non-ionic surfactant plus ammonium nitrogen fertilizer or a methylated seed oil or a “basic blend” type adjuvant. Use only spray grade quality urea ammonium nitrogen fertilizer (28-0-0 to 32-0-0 at 1 – 2 qt/acre) or ammonium sulfate fertilizer (21-0-0-24 at 1.5 – 3 lbs. /acre). When ammonium nitrogen fertilizer is used in tank mixture with OSPREY® Herbicide, transient leaf burn may occur. Do not use additives that alter the spray solution below 6.0 pH. Best results are obtained at spray solution pH of 6.0 – 8.0. Organosilicone-based surfactants or crop oil concentrate surfactants are not recommended for use with OSPREY® Herbicide – [See label for complete details!](#)

- 15 GPA, flat-fan nozzles, no flood jets or air-induction nozzles
- Air temps: for best results spray when day temps are 50° or higher and night temps stay above freezing
- Read and understand product label before use
- Questions contact Danny Digiacomandrea 585-330-3263 dan.digiacomandrea@bayer.com

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