

# Employee-Owned Research & Development Field Report 2<sup>nd</sup> Edition - May 2023

The PBI-Gordon Research & Development Team is pleased to present the second edition of the R&D Field Report. This report contains scientific information to support the important work underway by our agronomic partners, distribution representatives, and end-users. Our intent is to provide useful, research-based information prior to the seasonal emergence of pests. You can look for updated R&D Field Reports on a quarterly basis throughout 2023.

#### <u>Weeds</u>

- Post-Emergent Nutsedges and Kyllinga Control
  - Nutsedges and kyllinga weeds are emerging or beginning to emerge across the country
  - Vexis<sup>®</sup> Herbicide Granular
    - May be used on all labeled turfgrass species
    - Early-POST application maximizes the residual control with Vexis<sup>®</sup>
    - Scouting is important for timing early-POST applications. Look for nutsedges and kyllinga emerging in previously infested and wet and thin areas of turf.
    - Best program is two applications at 4 lb./1,000 ft<sup>2</sup> applied 6 weeks apart
    - Soil moisture is key to control. Make sure there is sufficient soil moisture for turfgrass and weed growth to maximize Vexis efficacy.
  - Katana® Turf Herbicide
    - Labeled for nutsedge/kyllinga control in bermudagrass putting greens
    - Kyllinga is controlled with two applications of 1.5 oz./A + NIS
    - Nutsedge is controlled with two applications of 2.5 3 oz./A + NIS
- Post-Emergent Broadleaf Control
  - Control any lingering winter annual weeds such as henbit, chickweed, purple deadnettle, or thistles and get a jump on summer broadleaf weeds with products such as SpeedZone<sup>®</sup> EW Broadleaf Herbicide for Turf, TZone<sup>™</sup> SE Broadleaf Herbicide for Tough Weeds, and Avenue<sup>™</sup> South Broadleaf Herbicide
  - Be careful of applications during turfgrass green-up and transition as herbicide applications can delay full spring green-up
- Post-Emergent Crabgrass Control
  - PREs should provide efficacy 90+ days after application, but there are often breakthroughs
  - Early-POST control with Q4<sup>®</sup> Plus Turf Herbicide for Grassy & Broadleaf Weeds is a great option to clean up any crabgrass escapes as well as any broadleaf weeds and nutsedges
  - Crabgrass is difficult to control at more mature growth stages, so early-POST application is best
  - Add NIS or MSO surfactants for best control and be aware of slight bermudagrass injury.
  - Katana<sup>®</sup> is an option for POST crabgrass control on bermudagrass putting greens. Apply two
    applications at 2.5 3.0 oz./A + NIS. A third application might be needed depending on
    crabgrass pressure.

#### <u>Diseases</u>

- May through June is optimal for preventive applications (initial or sequential applications) as part of a program for a variety of root pathogens, including:
  - Pythium root rot
    - Alternating Segway<sup>®</sup> Fungicide SC (or Union<sup>®</sup> Fungicide SC) and Serata<sup>™</sup> Fungicide on a 14-d interval is an ideal program
    - Suggested initial applications may commence when soil temperature at the 2" depth exceeds 60°F on a 5-day rolling average
  - o Summer patch
    - Union<sup>®</sup> at 5.75 fl. oz./1,000 and Tekken<sup>®</sup> Broad Spectrum Fungicide at 3.0 fl. oz./1,000 are excellent fungicides in a program
    - Suggested initial applications may commence when soil temperature at the 2" depth is at least 65°F on a 5-day rolling average
  - o Fairy ring
    - Sequential apps with Pedigree Fungicide SC at 3.25 fl. oz./1,000 or Union at 5.75 fl. oz./1,000 on a 28-d interval
    - Curative applications of Pedigree 4.4-6.6 fl. oz./1,000 and combined with wetting agent
- Foliar diseases such as dollar spot, brown patch, anthracnose, red thread, and Waitea patch are either currently active or about to be active
  - DMI fungicides and combination premixes including DMI fungicides, such as Tekken<sup>®</sup> applied at 3.0 fl. oz./1,000, are very efficacious for controlling dollar spot, brown patch, anthracnose, and Waitea patch on extended intervals
  - SDHI fungicides provide excellent control of dollar spot, but insensitive and/or resistant populations exist. If SDHI resistance is suspected, have a university pathologist confirm with appropriate testing
  - Red thread is a common problem in the LCO market, and Pedigree fungicide provides strong red thread and brown patch control, and is labeled for residential and commercial use
  - Anthracnose is best managed incorporating biweekly applications of 0.1-0.2 pounds of quick release nitrogen per 1,000 sq. ft. in conjunction with fungicides

# Plant Growth Regulators

- Apply Atrimmec<sup>®</sup> Plant Growth Regulator as a foliar spray for fast-acting, long-term regulation of landscape ornamental shrubs, hedges, trees, and groundcovers
  - Make applications within a few days after the first trimming of the season
  - Plants can usually be maintained in acceptable shape for a full season with a single application
- Ideal for lawn/landscape professionals managing residential and commercial properties, plus golf courses, club grounds, and common areas
- Powerful cost-saving tool to improve the aesthetic of landscape ornamental plants while significantly reducing annual maintenance inputs required
- Access our Trimming Cost Savings Calculator through the Atrimmec product page at <a href="https://www.pbigordonturf.com/atrimmec-trimming-cost-savings-calculator/">https://www.pbigordonturf.com/atrimmec-trimming-cost-savings-calculator/</a>

## Active Ingredients - Know the Difference (MCPP vs. MCPA)

- MCPA is an analog of 2,4-D, but less overall spectrum
- MCPP is better on clovers, chickweed, knotweed, purslane, and spurge compared to MCPA
- MCPA is not recommended to be applied alone, whereas MCPP can be applied alone
- Reference: FS385: Broadleaf Weed Control in Cool Season Turfgrasses (Rutgers NJAES)

### Formulation Chemistry

- If there are multiple users of the equipment, don't assume that the sprayer has been properly cleaned and ready for the season. Residual herbicides that may be in the tank or lines could cause issues for those early insecticide applications. Trusted spray tank cleaners should be used in combination with proper rinsing
- Don't be tempted to tank mix too many pesticides in one application. If you choose to apply multiple products, especially herbicides in one tank, always test the ratio with approximate water volume in a jar test.
- At a minimum, proper calibration of sprayers and spreaders should be done at the beginning of the season

# <u>New Product Corner</u>: Arkon™ Herbicide Liquid

- Arkon<sup>™</sup> is a new solution for turf professionals to control nutsedges and kyllinga
- Labeled for use on every major turfgrass species, including golf course putting greens
- Proven to reduce the number and viability of nutsedge tubers
- Coming Soon! For more information, contact your PBI-Gordon Sales Representative

\*Follow the most restrictive of the labeling limitations and precautions of all products used in mixtures. TZone<sup>™</sup>, Avenue<sup>™</sup>, Arkon<sup>™</sup> is a trademark of PBI-Gordon Corporation. Atrimmec®, Vexis®, SpeedZone®, Union®, Tekken® is a registered trademark of PBI-Gordon. Katana® and Segway® is a registered trademark of Ishihara Sangyo Kaisha, Ltd. Serata<sup>™</sup> is a trademark of FMC, Corporation.

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