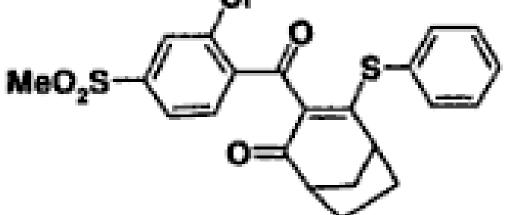


# Rogue Update LATMC February 10, 2022

Craig Sandoski



# Benzobicyclon is an Pro-Herbicide Aquatic



Benzobicyclon

Metabolite "B" Herbicidally active metabolite

MeO\_S

Hydrolysis metabolite is the actually herbicidal compound



οн

# **Benzobicyclon Technical Profile**

- Rogue must be hydrolyzed to become herbicidal.
- Metabolite B (the benzobicyclon hydrolysate) is absorbed through roots and shoots.
- Rogue exhibits no significant foliar activity above the water line.
- Rogue provides pre-emergence and post-emergence control of susceptible weeds.
- Rogue provides residual weed control.
- Rogue moves in water. Therefore, there is no "untreated check" in a Roguetreated field.
- Poor water management <u>WILL</u> result in poor weed control.



# Is Rogue Safe on Mid-South Rice Cultivars?

- Rogue is extremely safe to water-seeded rice. >3000 acres of commerciallytreated rice in four years of EUP's in Louisiana without an injury issue.
- Do not apply to the seeding flood in water-seeded rice!
- Apply to rice that is 1 leaf and standing.
- Applications to "pipping" rice have proven to be safe.

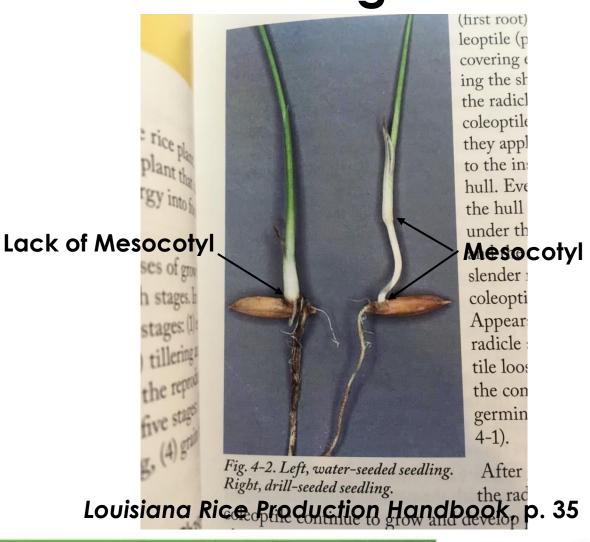
#### What about dry-seeded rice?

Herbicide Program: Rogue (12.6 oz./A.) + Permit (0.67 oz./A.) + COG(1.pt./A.) Applied 2 days after permanent flood to barnyardgrass (1 – 3 leaves), pickerelweed, yellow nutsedge, knotgrass and alligatorweed



#### What is the difference in water-seeded and dryseeded rice and how does it relate to Rogue®?

- Drill-seeded rice has a mesocotyl while waterseeded rice lacks a mesocotyl!
- Rogue is absorbed through root and shoot; the mesocotyl increases uptake of the metabolite!
- Water-seeded rice: apply as soon as rice "stands up"
- Dry-seeded rice: do not apply before 4 leaf stage



### Rogue<sup>®</sup> Application to LSU Clearfield Winter Nursery in Puerto Rico (2012)

2.7 - 4X rate of Rogue (33.6 oz./A.) + COC (1% v/v)





# **Rogue®: Water-Seeded Rice**

- Fits as a foundation herbicide
- Apply to rice that is 1 leaf and standing.
- Command should be applied at pegging where barnyardgrass is expected.
- Apply Rogue as soon as the permanent flood is established and planned to be held for the season.
- Pin-point flood system is ideal for Rogue. Apply Rogue into the pin-point flood.
- Fertilizer-coated applications (potash and urea) have proven to be as effective as foliar sprays.
- Don't wait on the timing of urea as delays in application of Rogue lead to decreased control.
- Positive effect of deep water on weed control.
- Excellent activity against aquatic weeds, annual sedges and sprangletop.
- Rogue complements an effective weedy rice control program, e.g. pin-point flood system.



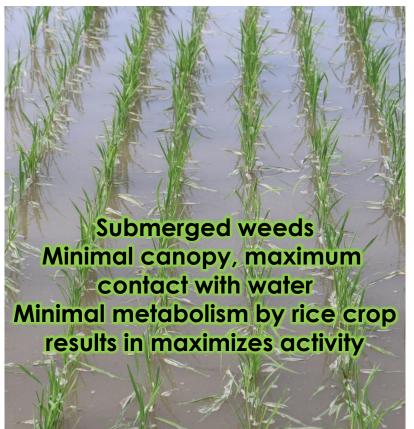
# **Rogue®: Dry-Seeded Rice**

- Morphological differences between water-seeded and dryseeded rice explain the timing difference.
- Do not apply Rogue to a submerged rice crop. Flood the dryseeded crop as soon as practical (4 leaf rice), apply Rogue as soon as the flood is stable, hold flood for 5 days before introducing additional flood water. Maintain the flood for the duration of the crop.
- Primary target weeds will be sprangletop (Amazon and bearded) and ALS-resistant annual sedges (rice flatsedge and smallflower umbrella sedge).
- Gambit complements Rogue for nutsedge and broadleaf weed control.

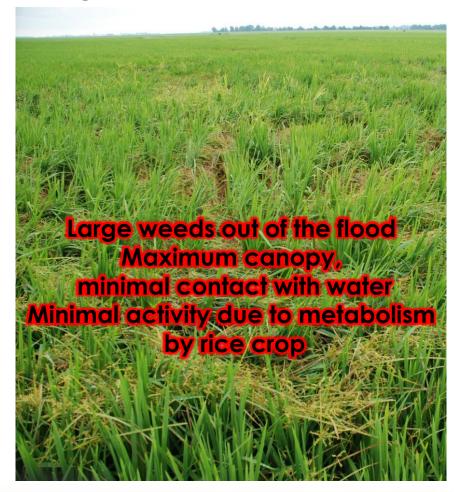


## What is the Best Fit for Rogue® in Dry-Seeded Rice?

#### "Lay-by" Application



#### Salvage or Rescue Application





# Spray or Fertilizer Application of Rogue®?

- When applied to rice with an open canopy, fertilizer applications of Rogue have proven to be as effective as liquid sprays. Liquid sprays result in faster dispersion of benzobicyclon than dry fertilizer applications.
- When applied to rice with a dense canopy, fertilizer applications of Rogue may be a better option, particularly when applied to a dry rice canopy. Activity may be slower with fertilizer applications.



# Rogue®: Dry-Seeded Rice

- Weedy rice control programs complemented by Rogue
  - Provisia®
  - Max-Ace®
  - Clearfield® or FullPage®
  - Must be able to selectively injure or delay development of the weedy rice versus the cultivated rice to create a growth differential.
  - Re-set the weedy rice clock such that the primary weedy rice component is working above the water, while Rogue is working beneath the water. The "over/under" effect.



# Summary of Rogue<sup>®</sup> Positioning on Mid-South Rice

- Rogue can be a "foundation" herbicide for water-seeded rice.
  Programs with Command and Gambit can provide season long control.
- Rogue can provide excellent control of ALS-resistant annual sedges and sprangletop as a post-flood application to dryseeded rice. The "lay-by" timing of Rogue application is ideal and will out-perform a "salvage" or "rescue" timing.
- Rogue can be applied with dry fertilizer and this may be preferred for dense canopies.
- Rogue is safe to Mid-South rice cultivars as well as non-target crops.
- Rogue can complement effective weedy rice control programs.

# **Certification Program Requirement for Rogue**



#### Earn 0.5 CEUs in Soil & Water Management

Upon Completion of the Rogue SC Training Video and Quiz





HTTPS://WWW.GOWANCO.COM/ROGUE-SC







and the second se