

Use of Provisia, Loyant and Gambit Herbicides in Rice – A Program Approach

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Overview of Weed Management Research

- **8 Experimental herbicides**
- **Provisia rice – Tolerance evaluation**
- **Continue to evaluate Provisia antagonism**
- **Adjuvants with Provisia to overcome antagonism**
- **Drift of Provisia to conventional rice**
- **Residual Herbicide programs**
- **How does Loyant fit systems**
- **How does benzobicyclon fit systems**
- **RiceOne interaction research**

Provisia Rice

PVL-01 Injury

Provisia at 15.5 oz/A



Provisia at 15.5 oz/A



Rice Injury Following Provisia at 31 oz/A







Antagonism is an Issue



Provisia + Grasp on 2-3 leaf rice



Provisia + Regiment on 2-3 leaf rice



Provisia + Propanil on 2-3 leaf rice



Provisia + Permit on 2-3 leaf rice

How to use Provisia Rice

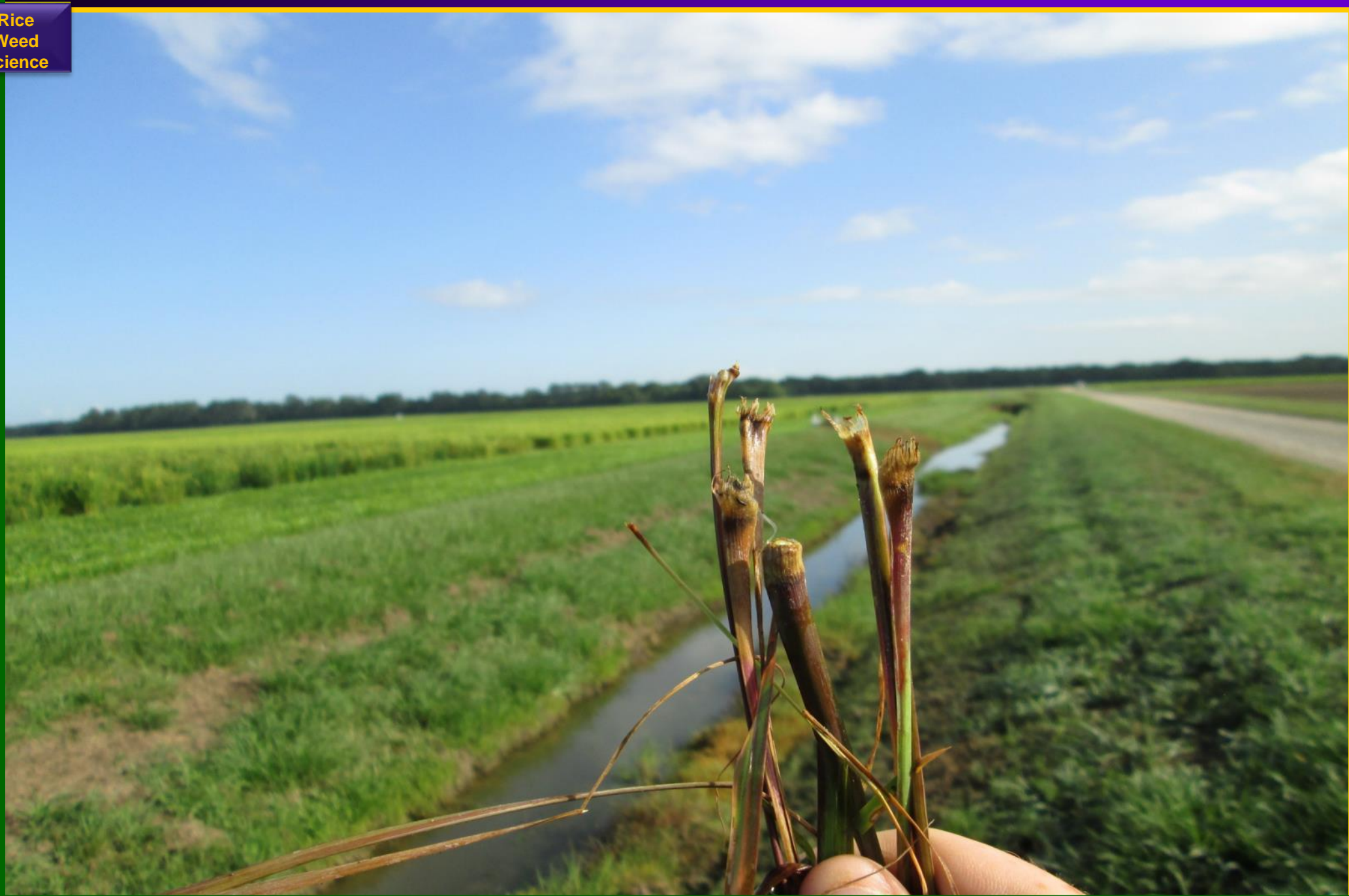
- Excellent option for weedy rice and common grass weeds
- Use residual – Command appropriate rate + Sharpen 2 oz/A, Prowl, RiceOne
- 13 to 18 oz/A Provisia 1st application, not to exceed 31 oz/A total
- Add high quality COC at 1% v/v
- Wait 10 days after first application, PI cutoff
- Evaluated reduced rates, not labeled
- Adequate moisture needed, flood at application not necessary
- Avoid mixing if possible
- Antagonism is an issue, do not mix with propanil, Grandstand, Grasp, GraspXtra, Regiment
- Refer to label for approved mixture herbicides
- Initial injury observed, recovered within a week
- Minimize overlap
- Drift issue on young rice, 1-3 leaf, at 3 oz/A or 20%

Loyant

Loyant

- **Dow AgroScience, Label early October**
- **Auxin activity – New mode of action**
- **Little to no injury on rice, cut ground**
- **Controls grasses in seedling stage, aquatics and sedges**
- **Excellent activity on Indian jointvetch and hemp sesbania**
- **Very little activity on Texasweed**
- **No residual**
- **Drill- and water-seeded rice**
- **Caution: This is an auxin herbicide, avoid drift to soybean**





Ducksalad Activity

Londax at 1 oz/A



Basagran 5L at 20 oz/A



Grasp Xtra at 20 oz/A



Loyant at 16 oz/A



Loyant at 16 oz/A



How to use Loyant

- **Apply at 1 pt/A**
- **Apply approved MSO at 0.5 pt/A**
- **Can apply 2 applications per year at 16 oz/A, 32 oz/A/yr**
- **14 days between applications**
- **Do not apply within 60 days of harvest**
- **Avoid mixing with OP insecticides**
- **Do not mix with propanil**
- **Avoid use on leveled fields, except water-leveling**
- **If flooded prior to application, weeds 70% exposed, wait 3 hr before adding**
- **No residual, flood within 3 days after application**

Gambit

Gambit

- **Gowan, Label early October**
- **Pre-package mixture of halosulfuron 50% + prosulfuron 29%**
- **1 to 2 oz/A, not to exceed 2 oz/A/yr**
- **Applied preemergence or postemergence - pre- or post-flood**
- **Refer to label for approved adjuvants, NIS, COC, MSO**
- **Rainfast 4-hrs**
- **48 day preharvest interval**
- **Apply to small actively growing weeds, 1-6"**
- **Controls sedges, alligatorweed, many other broadleaf weeds**

RiceOne

RiceOne

- **RiceCo, Label in early spring**
- **Pre-package mix of clomazone 11% + pendimethalin 26.79%**
- **Delayed preemergence to early postemergence**
- **Soil texture dependent, 24 to 50 oz/A**
- **24 oz/A – 8.5 oz/A Command and 1 pt/A Prowl H2O**
- **35 oz/A – 12.5 oz/A Command and 1.5 pt/A Prowl H2O**
- **50 oz/A – 17.8 oz/A Command and 2.1 pt/A Prowl H2O**
- **Prefer early postemergence in south Louisiana**
- **Excellent residual activity with 2 sites of action**
- **Keep agitated due to encapsulated formulation**

Conclusions

- **Herbicide development will continue**
- **Resistance issue will continue**
- **Continue to stress the use of multiple MOA**
- **Rotation – solve many problems year after year**
- **Provisia Rice will be adopted, and aid growers**
- **Weed Science will continue to stay out front in rice**
- **Thanks to the rice growers the Rice Research Board**

Questions