

COMPLEMENTACION ARROZ-GANADERIA



**Herramienta fundamental para altas
producciones**

2006 11 23

2006 6 30

CAMPOS DE LOMA ZONA CENTRO SUR



PALABRA CLAVE:

ROTACION

VENTAJAS ARROZ-GANADERIA:

- POSIBILIDAD DE ROTACIÓN:

DIFICULTAD DE PARA INTRODUCIR OTRAS CULTURAS DE SECANO (MAIZ-SOJA-ETC...)

EXTREMA FACILIDAD PARA INTRODUCIR LA HACIENDA DESPUES DEL ARROZ

VENTAJAS ARROZ-GANADERIA

- FACILIDAD PARA CUMPLIR LAS PREMISAS DEL PROYECTO DIEZ (IRGA):
 - HACER LAS LABORES CULTURALES EN TIEMPO Y FORMA (PREPARACION ANTICIPADA-DRENAJE-SIEMBRA).
 - CONTROL DE MALEZAS (PRINCIPALMENTE LOS PASTOS DE AGUA) Y ARROZ ROJO.
 - CORTAR CICLO DE ALGUNA PLAGAS

VENTAJAS ARROZ-GANADERIA

- APROVECHAMIENTO DE LOS RASTROJOS PARA PASTOREO DIRECTO:
 - RECURSO FORRAJERO "GRATUITO" Y ABUNDANTE QUE TE PERMITE RECUPERAR EL RESTO DE LOS CAMPOS NATURALES A LA ENTRADA DEL INVIERNO.
 - AUMENTO DE LA RECEPTIVIDAD DEL CAMPO ENTRE UN 15 Y UN 20 %.



VENTAJAS ARROZ-GANADERIA

- APROVECHAMIENTO DE LA COLA DE MAQUINA PARA CONFECCION DE ROLLOS:

RESERVA FORRAJERA CON COSTO RELATIVAMENTE BAJO (\$ 80 / rollo + 0 - \$ 0,20 / kg de M.S.).

Rend. Grano : 8.000 kg/ha

Rend. Mat. Seca (rastrojo): 8.000 kg/ha

Cola de maquina: 30%

Aprovechamiento: 50% = 3 a 4 rollos/ha.



2006 6 30







VENTAJAS ARROZ-GANADERIA

- POSIBILIDAD DE IMPLANTACIÓN DE PASTURAS INVERNALES (Rye Grass anual):
 - Una ha de RG sembrada con avión cuesta + o - \$ 160, eso traducido en kg de novillitos de recría son aprox. 16 kg. Cualquiera de estas pasturas, con un mínimo de manejo, producen arriba de los 150 kg/ha.
 - Control de malezas por alelopatía.



ALGUNAS CONSIDERACIONES Y
RECAUDOS A TENER EN CUENTA



● Cosecha en seco

A wide-angle photograph of a lush green cornfield stretching to the horizon under a clear blue sky. The rows of corn are dense and vibrant. In the distance, a small cluster of trees or a farm building is visible on the horizon line.

Nos permite hacer cosas como estas...

O esto...



2008 5 6

Para tener en cuenta:

- La elevación del pH por la inundación puede dejar una disponibilidad de P por unos 180 días, el RG aprovecha muy bien esto.
- Hay buena respuesta a la fertilización Nitrogenada (un motivo mas para dejar los lotes en buen estado después de la cosecha para poder hacer aplicaciones terrestres).

Ahora bien cuidado con esto!!!

To Texas Went My Hay To Texas Went My K ?

Louisiana rice farmers stepped up to the plate this year to help out their neighbors in dire need of assistance. The record drought in Texas left many pastures unproductive and hay stores depleted. That's where Louisiana farmers stepped in by providing straw from their recently harvested rice crop for hay. In many cases the rice straw was donated free of charge as long as the Texas cattleman baled and transported it back to Texas themselves. Some Louisiana farmers even went a step further by providing labor and the use of their own equipment to the effort. That's just what good neighbors should do. Men and women who make their living from agriculture understand that sometimes the weather does not cooperate with production plans. In fact, it hardly ever does. Who knows, it may be our turn to need assistance next year?

Actually, cutting and removing some of the rice straw after harvest has some benefits. Removing the straw from rice fields in a rice-crawfish double crop production system can sometimes benefit the crawfish crop by improving water quality. Decomposition of the straw removes oxygen from the water, which can stress growing crawfish. Research has also shown that post-harvest mowing or clipping the straw at a lower than normal harvest height of 16 inches has advantages for the ratoon (second)



crop. This often results in a ratoon crop that has a more uniform maturity, lower disease pressure and higher yield. While there are some touted benefits that can be associated with the removal of the rice straw this year, we may need to take a little time to consider what this means in relation to nutrient removal and the potential effect on soil-test-based fertilizer recommendations of future rice or rotational crops.

Table 1. Estimate of fertilizer nutrient uptake, removal, and current economic value in rice.

Rice yield		N	P ₂ O ₅	K ₂ O
<i>% of nutrient in above ground dry matter¹</i>				
Total uptake		1.58	0.84	2.4
grain		1.22	0.64	0.4
straw		0.36	0.20	2.0
<i>lb grain/acre</i>				
<i>lb nutrient per acre (fertilizer value per acre in \$)²</i>				
6000	Total uptake	95 (64)	50 (36)	144 (75)
	grain	73 (49)	38 (27)	24 (12)
	straw	22 (14)	12 (9)	120 (62)
8000	Total uptake	126 (85)	67 (48)	192 (100)
	grain	98 (65)	51 (36)	32 (17)
	straw	29 (19)	16 (11)	160 (83)
10000	Total uptake	158 (106)	84 (60)	240 (125)
	grain	122 (82)	64 (45)	40 (21)
	straw	36 (24)	20 (14)	200 (104)
<i>bales per acre</i>				
1	straw	3 (2)	2 (1) *	18 (9)
2.5	straw	8 (5)	5 (3)	45 (23)

¹ Adapted from Phillips, S. 2008. Strategies for assessing on-farm nutrient efficiency. International Plant Nutrition Institute. Pub. 007094. Avail. online at www.ipni.net.
² Local estimates of fertilizer costs per pound of N (\$0.40), P₂O₅ (\$0.40), and K₂O (\$0.10).

To begin, let's consider how much nitrogen (N), phosphorus (P) and potassium (K) are being removed on an acre basis and how much that would cost us to replace using traditional inorganic fertilizers. To make the calculation, we need to estimate a few things: 1) the average weight of a 4- by 5-foot rice straw bale is approximately 900 pounds; 2) an average of 2.5 bales per acre are being harvested; 3) the current local cost of urea (\$613 per ton; 0.67 per lb N), triple super phosphate (\$657 per ton; \$0.71 per lb P₂O₅) and potash (\$625 per ton; \$0.52 per lb K₂O) fertilizers; and 4) the estimated rice nutrient values, which can be seen in Table 1. You will notice from Table 1 that rice typically takes up approximately 95, 50 and 144 pounds of N, P₂O₅, and K₂O per 6,000 pounds of harvested rice. You will also see that 23, 24 and 83% of the total N, P₂O₅ and K₂O, respectively, taken up remains in the rice straw after harvest and is returned to the soil during decomposition. The greatest nutrient impact from removing the rice straw is on K. The total value of K₂O in the rice straw is approximately \$62 per acre when slightly below state average yields are obtained and a staggering \$104 when high (10,000 lb/A) yields are obtained. Luckily, we are not removing all of the straw from the field. Removing an average of 2.5 round bales per acre would have a fertilizer K₂O value of approximately \$23 and a total nutrient value of \$31 per acre when including N and P₂O₅. When this is multiplied over the total number of acres of rice straw baled on your farm, well you get the picture...

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Special Dates of Interest:	
USA Rice Outlook Conference Austin, TX, December 7-9, 2011	
National Conservation Systems Cotton and Rice Conference, Tunica, MS, January 31-February 1, 2012	
34 th Rice Technical Working Group Mtg. Hot Springs, AR, February 27-March 1, 2012	

Rice yield		N		P ₂ O ₅		K ₂ O	
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Algo de Números...

SIMULACION PARA UN CAMPO DE CRIA

Sin Arroz

Superficie		1.500 has
Carga en E.V.		0,63 EV
Carga Total		945 EV
Sup. Afectada a la Recria		300 has
Vientres Totales		756 Vacas
% Ternero Logrado		80%
Cantidad total de Terneros		605 Tros/as
Reposición	20%	121 Tras
Terneros M y H p/ Venta		484 Tros/as
Peso Medio de Venta		170 kg
Precio medio de Venta		\$ 12,00
Venta de Terneros M y H		\$ 987.033,60
Venta de Vaca de invernada	15%	\$ 251.748,00
Producción Total de Carne	kg	124.211
Producción de carne / ha ganadera	kg/ha	83

Facturación Total

\$ 1.238.781,60

SIMULACION PARA UN CAMPO DE CRIA y ENGORDE DE VACA

Con Arroz y RG en chacra espejo

Superficie Total		1.500 has
Superficie Arroz Mod 1	10%	150 has
Superf. RG Mod 2		150 has
Superf. Inundada Represa	33%	50 has
Carga en E.V.		0,7 EV
Sup. Afectada a la Recria (Mod 2)		150 has
Vientres Totales		805 Vacas
% Ternero Logrado		80%
Cantidad total de Terneros M y H		644 Tros/ras
Reposición	20%	129 Tras
Terneros M y H p/ Venta		515 Tros/ras
Peso Medio de Venta		170 kg
Precio medio de Venta		\$ 12,00
Venta de Terneros M y H		\$ 1.051.008,00
Venta de Vaca Gorda (encierre)	15%	\$ 353.193,75
Arrendam. Arroceros 1200 kg/ha	\$ 0,95	\$ 171.000,00
Producción Total de Carne	kg	132.262
Producción de carne / ha ganadera	kg/ha	102
Facturación Total		\$ 1.575.201,75

Diferencia x Rotac. c/ arroz \$ 336.420,15

Costos adicionales

Siembra RG	150	\$ 24.000,00
Confección de Rollos	300	\$ 24.000,00
Maiz y Expeller (para encierre 1% PV)	48300	\$ 38.640,00
Total de Gtos Adicionales		\$ 86.640,00

Margen a favor de la rotación \$ 163.140,15

Pero si además agregamos un corral de encierre...







“Subproductos” del arroz o de la rotación:

- Rollo de cola de maquina: \$ 0,20 / kg
- Quebrado integral: \$ 0,70 / kg
- Costo de prod. Trigo s/ Taipa: \$ 0,50 / kg
- Costo de prod. Sorgo s/ Taipa: \$ 0,45 / kg
- Costo de Prod. Soja s/ Taipa: \$ 1,20 / kg

Prácticamente todos los ingredientes necesarios para un encierre de recría o terminación. (c/ relaciones de conversión de 6 a 10 kg de alimento / kg producido) lo hacen hoy económicamente viable.

A photograph of a sunset with a satellite dish silhouette. The sun is low on the horizon, creating a bright orange and yellow glow. The sky is filled with soft, wispy clouds. In the foreground, the dark silhouette of a satellite dish is visible on the left side. The overall scene is peaceful and serene.

Muchas gracias

Ing. en P.A. Luis Martin Irastorza
E-mail: toroirastorza@hotmail.com