

Plant Materials Program

Jamie L. Whitten Plant Materials Center Coffeeville, MS

Plant Materials Technical Note No. 101

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ESTIMATED SEED PRODUCTION COST BUDGETS FOR COFFEEVILLE PMC RELEASES



Homer L. Wilkes State Conservationist Jackson, Mississippi

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INTRODUCTION

Estimated production cost budgets can be good tools when looking for possible growers for PMC releases. The first question a seed grower is going to want to know is "how much an acre does it cost to raise ______ seed crop". This information is vital when one is deciding on venturing into seed production of a new release.

In the future it is hopeful that we can produce a cost budget for each one of the PMC releases. It can be as detailed as one would like, but a simple chart such as the one used in the Native Grass Seed Production Manual would give a person the basic information of what one could expect expense wise in growing such release. A more detailed cost budget like the ones used for row crops by extension services could also be helpful in creating a guide for each release. Perennial crops would have expenses lined out for the establishment year as well as years following. Annual crops would be similar to other row crop cost budgets. The information could be used for possible new seed growers when making decisions about growing a PMC release. An added column that could be left blank for his/her own production factors could be included alongside PMC estimated input cost. Two budgets for each release would be necessary; one where conventional tillage is used and another for no-till. Sometimes perennial crops would need a fall and spring planting budget if both planting dates are possible. These budgets could be updated every two years as input cost change over time.

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Table of Contents

'Chiwapa' Millet, conventional till	. 5
'Chiwapa' Millet, no-till	. 6
'Highlander' Gamagrass, stale seedbed, Establishment Year	. 7
'Highlander' Gamagrass, stale seedbed, Year Two and Following Estimated Production Cost	. 8
Lark Selection Partridge Pea, conventional till	. 9
Lark Selection Partridge Pea, no-till	10
Lark Selection Partridge Pea, stale seedbed	11
'Meechee' Arrowleaf Clover, conventional till, establishment year	12
'Meechee' Arrowleaf Clover, conventional till, Year Two and following estimated production cost	_
'Meechee' Arrowleaf Clover, no-till, establishment year	14
'Meechee' Arrowleaf Clover, no-till, Year Two and Following Estimated Production Cost	15
'Quail Haven' Reseeding Soybean, conventional till w/corn	16
'Quail Haven' Reseeding Soybean, no-till	17
'Quail Haven' Reseeding Soybean, stale seedbed till w/corn	18



'Chiwapa' Millet, conventional till

Estimated Production Cost for 'Chiwapa' Millet (conventional tilled) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or task	Cost / Acre	Your Farm
Foundation Seed (16 lbs/acre)	\$24	
Seedbed Preparation (disk 2X, harrow, roll)	\$80	
Drill Millet	\$20	
Apply Herbicides (2 applications)	\$20	
Apply Fertilizer w/tractor-spreader (2 applications)	\$10	
Harvest (Combine w/ 20 ft header)	\$25	
Fertilizer (8-24-24 @ 200 lbs/acre)	\$34	
Fertilizer (34-0-0 @ 150 lbs/acre)	\$24	
Post-emerge Herbicide (broadleaves) + surfactan	t \$4	
Post-emerge Herbicide (broadleaves) + surfactan	t \$8	
Total Estimated Production Cost =	\$249	

1. Expected seed yield II	o/acre
2. Expected price per lb	_
3. Gross return minus production cost _	



'Chiwapa' Millet, no-till

Estimated Production Cost for 'Chiwapa' Millet (no -till) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (16 lbs/acre)	\$24	
Drill Millet	\$20	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor/spreader (2 applications) \$20	
Harvest (Combine w/20 ft header)	\$25	
Fertilizer (8-24-24 @ 200 lbs/acre)	\$34	
Fertilizer (34-0-0 @ 150 lbs/acre)	\$24	
Burndown Herbicides	\$9	-
Burndown Herbicide	\$10	
Post-emerge Herbicide (broadleaves) + surfactar	nt \$4	
Post-emerge Herbicide (broadleaves) + surfactar	nt \$8	
Total Estimated Production Cost =	#040	
Total Estimated Production Cost =	\$218	

 Expected seed yield _ 	lb/acre
2. Expected price per lb	
3. Gross return minus p	roduction cost



'Highlander' Gamagrass, stale seedbed, Establishment Year

Estimated Production Cost for 'Highlander' Gamagrass (seed production) (stale seedbed) 2005 Jamie L.Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (16 lbs/acre)	\$192	
Seedbed Preparation (disk 2X, bed, roll)	\$80	
Plant Cover Crop w/tractor-spreader	\$8	
Plant Highlander Gamagrass	\$20	
Apply Herbicides (5 applications)	\$50	
Apply Fertilizer w/tractor-spreader (2 applications)	\$10	
Apply Lime (1 application @ \$25/ton)	\$25	
Fertilizer (8-24-24 @ 300lbs/acre)	\$51	
Fertilizer (34-0-0 @ 150lbs/acre)	\$24	
Burndown Herbicides (2 applications)	\$18	
Pre-emerge Herbicides	\$8	
Early Post-emerge Herbicide	\$4	
Post-emerge Herbicide (broadleaves)	\$8	
Hand roguing (2 hours/acre)	\$20	
Cover Crop Seed (wheat)	\$11	
Total Estimated Production Cost for Establishment Year =	\$529	

*note: there is no expected seed yield during the first year of establishment



'Highlander' Gamagrass, stale seedbed, Year Two and Following Estimated Production Cost

Year Two and Following Estimated Production Cost

tem or Task	Cost / Acre	Your Farm
Burn Fields (2 hours/acre)	\$20	
Apply Herbicides (4 applications)	\$40	
Apply Insecticide (1 application)	\$10	
Apply Fertilizer w/tractor-spreader (3 applications)		
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Fertilizer (34-0-0 @ 150 lbs/acre >spring)	\$24	
Fertilizer (34-0-0 @ 150 lbs/acre >post-harvest)	\$24	
Soil Applied Residual Herbicides	\$8	
Early Post-emerge Herbicide (grass)	\$20	
Post-emerge Herbicide (broadleaves)	\$8	
Post-emerge Herbicide (spot-spraying)	\$2	
Harvest (Combine w/ 20ft header)	\$25	
Hand Roguing (2 hours/acre)	\$20	
nsecticide	\$5	
Total Estimated Yearly Production Cos for Highlander Seed Production	\$263	
note: seed yield per acre will be small in year	two compared to following	years
Expected Income / Your Farm		
1. Expected cost of establishment per acre = _		
2. Expected production cost per acre in years t		
3. Expected seed yield / acre in year two of pro		
4. Expected seed yield / acre each year following	ng =	
5. Expected price per lb =		
6. Gross return minus production cost		



Lark Selection Partridge Pea, conventional till

Estimated Production Cost for Lark Selection Partridge Pea (conventional tilled) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task Foundation Seed (8 lbs PLS / acre Seedbed Preparation (disk, harrow, bed) Plant Apply Herbicides (3 applications) Apply Fertilizer w/tractor-spreader Cultivate (2 trips) Harvest (Combine w/ 20ft header Fertilizer (0-20-20 @ 300 lbs/acre	\$100 \$75 \$20 \$30 \$5 \$25 \$25 \$42	Your Cost
Pre-emerge Herbicide (grass) Post-emerge Herbicide (grass) + crop oil Post-emerge Herbicide (broadleaves) + surfactant Hand Roguing (2 hours/acre)	\$12 \$13 \$12 \$20	
Total Estimated Production Cost =	\$379	
Expected Income / Your Farm		
1. Expected seed yield lb/acre)	

3. Gross return minus production cost _____

2. Expected price per lb _



Lark Selection Partridge Pea, no-till

Estimated Production Cost for Lark Selection Partridge Pea (no-till) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (8 lbs PLS / acre)	\$100	
Plant Partridge Peas	\$20	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader	\$5	
Harvest (Combine w/ 20ft header)	\$25	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Burndown Herbicides	\$9	
Pre-emerge Herbicide (grass)	\$12	
Post-emerge Herbicide (grass) + crop oil	\$13	
Post-emerge Herbicide (broadleaves) + surfacta	nt \$12	
Hand Roguing (2 hours/acre)	\$20	

Toatal Estimated Production Cost = \$298

1. Expected seed yield	lb/acre
2. Expected price per lb	_
3. Gross return minus production cost	



Lark Selection Partridge Pea, stale seedbed

Estimated Production Cost for Lark Selection Partridge Pea (stale seedbed) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Cost
Foundation Seed (8 lbs PLS / acre)	\$100	
Seedbed Preparation (disk, harrow, bed)	\$75	
Plant Cover Crop w/tractor-spreader	\$8	
Plant Partridge Pea	\$20	
Cover Crop Seed (wheat)	\$11	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader	\$5	
Harvest (Combine w/ 20ft header	\$25	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Burndown Herbicides	\$9	
Pre-emerge Herbicide (grass)	\$12	
Post-emerge Herbicide (grass) + crop oil	\$13	
Post-emerge herbicide (broadleaves) + surfactant	\$12	
Hand Roguing	\$20	
Total Estimated Production Cost =	\$392	

1. Expected seed yield	lb/acre
2. Expected price per lb	
3. Gross return minus pro-	duction cost



1

'Meechee' Arrowleaf Clover, conventional till, establishment year

Estimated Production Cost for 'Meechee' Arrowleaf Clover (conventional till) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task Foundation Seed (10 lbs/acre) Seedbed Preparation (disk 2X, harrow, roll 2X) Drill Meechee Seed Apply Herbicides (2 applications) Apply Fertilizer w/tractor-spreder (1 application) Apply Lime (1 application @ \$25/ton) Fertilizer (0-20-20 @ 300 lbs/acre) Pre-emerge Herbicide (grass) Post-emerge Herbicide (grass) + crop oil Hand Roguing (2 hours/acre) Harvest (Combine w/ 20ft header) Maintenance Clipping (tractor w/bush hog 2X)	\$15 \$90 \$25 \$20 \$5 \$25 \$42 \$4 \$13 \$20 \$25 \$50	Your Farm
Total Estimated Production Cost for Establishment Year = Expected Income / Your Farm 1. Expected seed yield lb/acre 2. Expected price per lb 3. Gross return minus production cost	\$334	



'Meechee' Arrowleaf Clover, conventional till, Year Two and following estimated production cost

'Meechee' Arrowleaf Clover, conventional till, Year Two and Following Estimated Production Cost

2

Item or Task	Cost / Acre	Your Farm
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader (1 application)	\$5	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Soil Applied Residual Herbicide (grass)	\$4	
Post-emerge Herbicide (grass)	\$13	
Post-emerge Herbicide (broadleaves)	\$18	
Post-emerge Herbicide (spot spraying)	\$2	
Hand Roguing (2 hours/acre)	\$20	
Harvest (Combine w/ 20ft header)	\$25	
Maintenance Clipping (tractor w/bush hog 2X)	\$50	
Total Estimated Yearly Production Cost for Meechee Seed Production =	\$219	
Expected Income / Your Farm		
Expected cost/acre for establishment year		
2. Expected production cost per acre in following		
3. Expected seed yield/acre		
4. Expected price per lb		
5. Expected return above production cost		



1

'Meechee' Arrowleaf Clover, no-till, establishment year

Estimated Production Cost for 'Meechee' Arrowleaf Clover (no-till) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (10 lbs/acre)	\$15	
Drill Meechee Seed	\$25	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader (1 application)	\$5	
Apply Lime (1 application @ \$25/ton)	\$25	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Burndown Herbicide	\$9	
Burndown Herbicide	\$9	
Pre-emerge Herbicide (grass)	\$4	
Post-emerge Herbicide (grass) + crop oil	\$13	
Hand Roguing (2 hours/acre)	\$20	
Harvest (Combine w/ 20ft header)	\$25	
Maintenance Clipping (tractor w/bush hog 2X)	\$50	
Total Estimated Production Cost for Establishment Year =	\$282	
Expected Income / Your Farm		
Expected seed yield lb/acre Expected price per lb Gross return minus production cost		

*note: estimated cost for following years on next page



2

'Meechee' Arrowleaf Clover, no-till, Year Two and Following Estimated Production Cost

'Meechee' Arrowleaf Clover, no-till,Year Two and Following Estimated Production Cost

Item or Task	Cost / Acre	Your Farm
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader (1 application)	\$5	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Soil Applied Residual Herbicide (grass)	\$4	
Post-emerge herbicide (grass)	\$13	
Post-emerge Herbicide (broadleaves)	\$18	
Post-emerge Herbicide (spot spraying)	\$2	
Hand Roguing (2 hours/acre)	\$20	
Harvest (Combine w/ 20ft header)	\$25	
Maintenance Clipping (tractor w/bush hog 2X)	\$50	
Total Estimated Yearly Production Cos		
for Meechee Seed Production =	\$219	

Expected cost/acre for establishment year	
2. Expected production cost per acre in following years	
B. Expected seed yield/acre	
4. Expected price per lb	
5 Expected return above production cost	



'Quail Haven' Reseeding Soybean, conventional till w/corn

Estimated Production Cost for 'Quail Haven' Reseeding Soybeans (conventional till with corn) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (20 lbs/acre)	\$30	
Corn Seed (10 lbs/acre)	\$20	
Seedbed Preparation (disk 2X, harrow)	\$75	
Plant	\$20	
Apply Herbicides (3 applications)	\$30	
Apply Fertilizer w/tractor-spreader	\$5	
Cultivate (1 pass)	\$12	
Harvest (Combine w/ 20ft header)	\$25	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Pre-emerge herbicides (grass + broadleaves)	\$22	
Post-emerge herbicide (broadleaves) + surfactant	\$18	
Post-emerge herbicide (broadleaves) + surfactant	\$18	
Hand Roguing (2 hours/acre)	\$20	
Total Estimated Production Cost =	\$337	
Expected Income / Your Farm		
Expected seed yield lb/acre Expected price per lb Gross return minus production cost		



'Quail Haven' Reseeding Soybean, no-till

Estimated Production Cost for 'Quail Haven' Reseeding Soybeans (no-till) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (20 lbs/acre)	\$30	
Plant	\$25	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader	\$5	
Harvest (Combine w/ 20ft header)	\$25	
Fertilizer (0-20-20 @ 300 lbs/acre)	\$42	
Burndown Herbicides	\$9	
Pre-emerge Herbicides (grass + broadleaves)	\$25	
Post-emerge Herbicide (grass) + crop oil	\$13	
Post -emerge Herbicide (broadleaves) + surfactant	·	
Hand Roguing (2 hours/acre)	\$20	
Total Estimated Production Cost =	\$246	
Expected Income / Your Farm		
Expected seed yield lb/acre Expected price per lb Gross return minus production cost		



'Quail Haven' Reseeding Soybean, stale seedbed till w/corn

Estimated Production Cost for 'Quail Haven' Reseeding Soybeans (stale seedbed with corn) 2005 Jamie L. Whitten Plant Materials Center Coffeeville, Mississippi

Item or Task	Cost / Acre	Your Farm
Foundation Seed (20 lbs/acre)	\$30	
Corn Seed (10 lbs/acre)	\$20	
Seedbed Preparation (disk 2X, harrow)	\$75	
Plant	\$20	
Plant Cover Crop w/tractor-spreader	\$8	
Cover Crop Seed (wheat)	\$11	
Apply Herbicides (4 applications)	\$40	
Apply Fertilizer w/tractor-spreader	\$5	
Harvest (Combine w/ 20ft header)	\$25	
Fertilizer (0-20-20 @ 300lbs/acre)	\$42	
Burndown Herbicides	\$9	
Pre-emerge Herbicides (grass + broadleaves)	\$22	
Post-emerge Herbicides (broadleaves) + surfactan	t \$18	
Post-emerge Herbicides (broadleaves) + surfactan		
Hand Roguing (2 hours/acre)	\$20	
Total Estimated Production Cost =	\$363	

Expected Income / Your Farm

1. Expected seed yield	lb/acre
2. Expected price per lb	
3. Gross return minus product	tion cost

Mississippi Production Cost Guide, April 2006 USDA-Natural Resources Conservation Service Jamie L. Whitten Plant Materials Center, Coffeeville, MS Ecological Sciences, Jackson, MS