

**Iraq-ICARDA-Australia Project (ACIAR CIM/2004/024) Better crop germplasm and management for improved production of wheat, barley and pulse and forage legumes in Iraq**

**Technical Report 2005/2006 Appendix 3.**

Details of crop management for all crops in alphabetical order of sites

Table (A-1)

Location: AL Hatra

Total annual rain fall: 240 mm; Rain zone: LRA

Soil texture: Silty clay

Farmer name : Abd AL Majeed Saleh Hamid; Village: AL Makhzaka

Crop name: Barley

Variety		Local black barley	Tadmor	Zanbaka
Area(hectares)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing		
	Con.	Seeder disk		
Amount of seed kg/ hectare	Demons.	120		
	Con.	120		
Date of sowing	Demons.	4/1/2006		
	Con.	5/1/2006		
Seeder type.	Demons.	Rama		
	Con.	Rama		
Fertilizer kg/ hectare	Demons.	40 urea		
	Con.	None		
Protection	Demons.	None		
	Con.	-		

**Table (A – 2)**

**Location: AL Hatra**

**Total annual rain fall: 240 mm**

**Rain zone: LRA**

**Soil texture: silty clay**

**Farmer name: Abd AL Majeed Saleh Hamid**

**Village :AL Makhzaka**

**Crop name: Forage mixture**

<b>Variety</b>		<b>Bekia/713</b>	<b>IPA/2001</b>
<b>Area(hectare)</b>	<b>Demons.</b>	<b>1</b>	<b>5</b>
	<b>Con.</b>	<b>-</b>	<b>-</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>Iraqian disk</b>	
	<b>Con.</b>	<b>-</b>	
<b>Amount of seed kg/ hectare</b>	<b>Demons.</b>	<b>100 Bekia + 20 Barley</b>	
	<b>Con.</b>	<b>-</b>	
<b>Date of sowing</b>	<b>Demons.</b>	<b>12/12/2005</b>	
	<b>Con.</b>	<b>-</b>	
<b>Seeder type</b>	<b>Demons.</b>	<b>Rama</b>	
	<b>Con.</b>	<b>-</b>	
<b>Fertilizer kg/ hectare</b>	<b>Demons.</b>	<b>20 urea</b>	
	<b>Con.</b>	<b>-</b>	
<b>Protection</b>	<b>Demons.</b>	<b>-</b>	
	<b>Con.</b>	<b>-</b>	
<b>Notes</b>			

**Table (C - 1)****Location: AL Mahalabya****Total annual rain fall: 438 mm****Rain zone: LRA****Soil texture: silty clay loam****Farmer name: Mohamed Khther Wahab****Village: AL Mahalabya****Crop name: Barley**

<b>Variety</b>		<b>Tadmor</b>
<b>Area(hectare)</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Ploughing</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Amount of seed kg/ hectare</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Date of sowing</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Seeder type.</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Fertilizer kg/ hectare</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Protection</b>	<b>Demons.</b>	-
	<b>Con.</b>	-
<b>Notes</b>		

**Table (C - 2)**

**Location: AL Mahalabya**

**Total annual rain fall: 438 mm**

**Rain zone: LRA**

**Soil texture: silty clay loam**

**Farmer name: Mohamed Khther Wahab**

**Village: AL Mahalabya**

**Crop name: Forage mixture**

Variety		Kakouz	Bekia IPA / 2001
Area(hectare)	Demons.	1	5
	Con.	-	-
Ploughing	Demons.	disk	
	Con.	-	
Amount of seed kg/ hectare	Demons.	100 g kakouz +20 kg barley	100 k.g Bekia + 20 kg Barley
	Con.	-	
Date of sowing	Demons.	29/2/2005	
	Con.	-	
Seeder type.	Demons.	Iraqian seed disk	
	Con.	-	
Fertilizer kg/ hectare	Demons.	40 Urea	
	Con.	-	
Protection	Demons.	-	
	Con.	-	
Notes			

**Table (G – 1)**  
**Location: ALQUSH**  
**Total annual rain fall: 512 mm**  
**Rain zone : HRA**  
**Soil texture: clay**  
**Farmer name: Jarjes polus bahnam**  
**Soil fertility: K 486ppm, P 14.19ppm**  
**Village: Der AL Sayada**  
**Crop name: Triticum aestivum**

Variety		Abo Ghraib / 3	Cham / 6	Cham / 4
Area(hectare)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk		
Amount of seed kg/ hectare	Demons.	120		
	Con.	120		
Date of sowing	Demons.	23/2/2006		
	Con.	28/2/2006		
Seeder type	Demons.	Kaspardo		
	Con.	Seed disk		
Fertilizer kg/ hectare	Demons.	56 DAP 100 Urea		
	Con.	60 DAP 100 Urea		
Protection	Demons.	Protection of sowna insect by sedial , control of narrow and wide weed leafs was not done.		
	Con.	Protection of sowna insect by sedial , control of narrow and wide weed leafs was not done.		
Notes				

Table (G – 2)

Location: ALQUSH

Total annual rain fall: 512 mm

Rain zone : HRA

Soil texture: clay

Farmer name: Jarjes polus bahnam

Soil fertility: K 486ppm, P 14,19ppm

Village : Der AL Sayada

Crop name: Durum Wheat

Variety		Abo Ghraib / 3	Cham / 6	Cham / 4
Area(hectare)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk		
Amount of seed kg/ hectare	Demons.	140		
	Con.	140		
Date of sowing	Demons.	23/2/2006		
	Con.	28/2/2006		
Seeder type.	Demons.	Kaspardo		
	Con.	Seed disk		
Fertilizer kg/ hectare	Demons.	56 DAP 100 Urea		
	Con.	60 DAP 100 Urea		
Protection	Demons.	Protection of sowna insect by sedial , control of narrow and wide weed leafs was not done.		
	Con.	Protection of sowna insect by sedial , control of narrow and wide weed leafs was not done.		
Notes				

**Table (G – 3)**  
**Location: ALQUSH**  
**Total annual rain fall: 512 mm**  
**Rain zone : HRA**  
**Soil texture: clay**  
**Farmer name: Jarjes polus bahnam**  
**Soil fertility: K 486ppm, P 14.19ppm**  
**Village : Der AL Sayada**  
**Crop name: Faba bean**

<b>Variety</b>		<b>ILB</b>
<b>Area(hectare)</b>	<b>Demons.</b>	<b>1</b>
	<b>Con.</b>	<b>-</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>Seed disk</b>
	<b>Con.</b>	<b>-</b>
<b>Amount of seed kg/ hectare</b>	<b>Demons.</b>	<b>80</b>
	<b>Con.</b>	<b>-</b>
<b>Date of sowing</b>	<b>Demons.</b>	<b>5/1/2006</b>
	<b>Con.</b>	<b>-</b>
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing disseminated</b>
	<b>Con.</b>	<b>-</b>
<b>Fertilizer kg/ hectare</b>	<b>Demons.</b>	<b>60 DAP 20 Urea</b>
	<b>Con.</b>	<b>-</b>
<b>Protection</b>	<b>Demons.</b>	<b>None</b>
	<b>Con.</b>	<b>-</b>
<b>Notes</b>		

**Table (G – 4)**

**Location: ALQUSH**

**Total annual rain fall: 512 mm**

**Rain zone : HRA**

**Soil texture: clay**

**Farmer name: Jarjes polus bahnam**

**Soil fertility: K 486ppm, P 14.19ppm**

**Village : Der AL Sayada**

**Crop name: Chickpea**

<b>Variety</b>		<b>IPA/ 510</b>	<b>Chap / 4</b>
<b>Area(hectare)</b>	<b>Demons.</b>	<b>1</b>	<b>2</b>
	<b>Con.</b>	-	
<b>Ploughing</b>	<b>Demons.</b>	<b>Seed disk</b>	
	<b>Con.</b>	-	
<b>Amount of seed kg/ hectare</b>	<b>Demons.</b>	<b>100</b>	
	<b>Con.</b>	-	
<b>Date of sowing</b>	<b>Demons.</b>	<b>5/1/2006</b>	
	<b>Con.</b>	-	
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing disseminated</b>	
	<b>Con.</b>	-	
<b>Fertilizer kg/ hectare</b>	<b>Demons.</b>	<b>60 DAP 20 Urea</b>	
	<b>Con.</b>	-	
<b>Protection</b>	<b>Demons.</b>	<b>None</b>	
	<b>Con.</b>	-	
<b>Notes</b>			

**Table (F – 1)**

**Location: Baashiqa**

**Total annual rain fall: 349 mm**

**Rain zone: MRA**

**Soil texture: silty clay**

**Farmer name: Salou Hamoka Jamaa**

**Soil fertility: K 219.3ppm, P 5.9ppm**

**Village: Agge joukh**

**Crop name: Triticum aestivum**

variety		Tell Affer /3	IPA / 99	Cham / 3	Abo Ghraib/ 3	Adnania
Area(hectar)	Demons.	1	1	1	1	1
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	Triple plow + smoothing disk				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	4/1/2006				
	Con.	4/1/2006				
Seeder type.	Demons.	Iraqian seeder				
	Con.	Iraqian seeder				
Fertilizer kg/ hectar	Demons.	56 DAP.	160 Urea.	32 Potassium sulfate.		
	Con.	40 DAP. 60 Urea.				
Protection	Demons.	Protection of narrow and wide weed leafs by lintor& topic protection of sowna insect by E – C.				
	Con.	Protection of narrow and wide weed leafs by lintor& topic protection of sowna insect by E – C.				
Notes						

**Table (F – 2)**

**Location: Baashiq**

**Total annual rain fall: 349 mm**

**Rain zone: MRA**

**Soil texture: silty clay**

**Farmer name: Salou Hamoka Jamaa**

**Soil fertility : k 219,3 ppm**

**Village: Agge joukh**

**Soil fertility : p 5,9 ppm**

**Crop name..... Durum wheat .....**

variety		Om Rabiaa	Cham / 6	Karonia
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Triple plow + smoothing disk		
Amount of seed kg/ hectar	Demons.	140		
	Con.	140		
Date of sowing	Demons.	3/1/2006		
	Con.	3/1/2006		
Seeder type.	Demons.	Iraqian seeder		
	Con.	Iraqian seeder		
Fertilizer kg/ hectar	Demons.	56 DAP.	160 Urea.	32 Potassium sulfate.
	Con.	40 DAP. 60 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by lintor& topic protection of sowna insect by E – C .		
	Con.	protection of narrow and wide weed leafs by lintor& topic protection of sowna insect by E – C .		
Notes				

Table ( F – 3)

Location : Baashiqa

Total annual rain fall: 349 mm

Rain zone : MRA

Soil texture: silty clay

Farmer name : Salou Hamoka Jamaa

Soil fertility : k 219,3 ppm

Village : Agge joukh

Soil fertility : p 5,9 ppm

Crop name..... Barley .....

variety		Jazzera / 1	Local black barley	Furat / 1	Rihan / 3
Area(hectar)	Demons.	1	1	1	1
	Con.	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk			
	Con.	Triple plow + smoothing disk			
Amount of seed kg/ hectar	Demons.	120			
	Con.	120			
Date of sowing	Demons.	5/1/2006			
	Con.	5/1/2006			
Seeder type.	Demons.	Iraqian seeder			
	Con.	Iraqian seeder			
Fertilizer kg/ hectar	Demons.	32 DAP.	80 Urea.	20 Potassium sulfate.	
	Con.	Non.			
Protection	Demons.	Non.			
	Con.	Non.			
Notes					

**Table ( F – 4)**

**Location : Baashiqa**

**Total annual rain fall: 349 mm**

**Rain zone: MRA**

**Soil texture: silty clay**

**Farmer name: Salou Hamoka Jamaa**

**Soil fertility: k 219,3 ppm**

**Village: Agge joukh**

**Soil fertility: p 5,9 ppm**

**Crop name..... Lentil .....**

variety		IPA / 98	Adlip / 3
Area(hectar)	Demons.	4	1
	Con.	-	-
Ploughing	Demons.	disk	
	Con.	-	
Amount of seed kg/ hectar	Demons.	100	
	Con.	-	
Date of sowing	Demons.	6/1/2006	
	Con.	-	
Seeder type.	Demons.	Iraqian seeder	
	Con.	-	
Fertilizer kg/ hectar	Demons.	60 DAP. 20 Urea.	
	Con.	-	
Protection	Demons.	Non.	
	Con.	-	
Notes			

**Table ( F – 5)**

**Location : Baashiqa**

**Rain zone : MRA**

**Farmer name : Salou Hamoka Jamaa**

**Village : Agge joukh**

**Total annual rain fall: 349 mm**

**soil texture: silty clay**

**soil fertility : k 219,3 ppm**

**soil fertility : p 5,9 ppm**

**Crop name..... Chickpea .....**

variety		Chab / 4	IPA / 510
Area(hectar)	Demons.	2	1
	Con.	-	-
Ploughing	Demons.	disk	
	Con.	-	
Amount of seed kg/ hectar	Demons.	100	
	Con.	-	
Date of sowing	Demons.	6/1/2006	
	Con.	-	
Seeder type.	Demons.	Iraqian seeder	
	Con.	-	
Fertilizer kg/ hectar	Demons.	60 DAP.	20 Urea.
	Con.	-	
Protection	Demons.	Non.	
	Con.	-	

**Table (F – 6)**

**Location : Baashiqa**

**Rain zone : MRA**

**Farmer name : Salou Hamoka Jamaa**

**Village : Agge joukh**

**Total annual rain fall: 349 mm**

**soil texture: silty clay**

**soil fertility : k 219,3 ppm**

**soil fertility : p 5,9 ppm**

**Crop name..... Forage lequems .....**

variety		Bekia / 2001	Felux	Bekia / 2001 Mix
Area(hectar)	Demons.	1	0,5	1
	Con.	-	-	-
Ploughing	Demons.	Seed disk		
	Con.	-		
Amount of seed kg/ hectar	Demons.	100		
	Con.	-		
Date of sowing	Demons.	6/1/2006		
	Con.	-		
Seeder type.	Demons.	Iraqian seeder		
	Con.	-		
Fertilizer kg/ hectar	Demons.	Non.		
	Con.	-		
Protection	Demons.	Non.		
	Con.	-		

Table ( E – 1 )

Location : AL Hamdania

Rain zone : MRA

Farmer name : Abas Saber Ali

Village : AL Twajna

Total annual rain fall : 548 mm

soil texture: clay

soil fertility : k 486 ppm

soil fertility : p 7,56 ppm

Crop name..... Triticum aestivum .....

variety		Abo Ghraib	Adnania	Tell Affer	IPA / 99	Cham / 6
Area(hectar)	Demons.	1	1	1	1	1
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	Seed disk				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	5/1/2006				
	Con.	5/1/2006				
Seeder type.	Demos.	Iraqian seeder				
	Con.	Iraqian seeder				
Fertilizer kg/ hectar	Demos.	32 DAP. 160 Urea. 20 Potassium sulfate.				
	Con.	80 DAP. 100 Urea.				
Protection	Demos.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial .				
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial .				

**Table ( E – 2 )**

**Location : AL Hamdania**

**Rain zone : MRA**

**Farmer name : Abas Saber Ali**

**Village : AL Twajna**

**Total annual rain fall : 548 mm**

**soil texture: clay**

**soil fertility : k 486 ppm**

**soil fertility : p 7,56 ppm**

**Crop name..... Durum wheat .....**

variety		Cham / 5	Karonia	Om Rabiaa
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + hoe		
	Con.	hoe		
Amount of seed kg/ hectar	Demons.	140		
	Con.	140		
Date of sowing	Demons.	5/1/2006		
	Con.	5/1/2006		
Seeder type.	Demons.	Iraqian seeder		
	Con.	Iraqian seeder		
Fertilizer kg/ hectar	Demons.	32 DAP. 160 Urea. 20 Potassium sulfate.		
	Con.	80 DAP. 100 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial .		
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial .		
Notes				

**Table ( E – 3 )**

**Location : AL Hamdania**

**Rain zone : MRA**

**Farmer name : Abas Saber Ali**

**Village : AL Twajna**

**Total annual rain fall : 548 mm**

**soil texture: clay**

**soil fertility : k 486 ppm**

**soil fertility : p 7,56 ppm**

**Crop name..... Barley .....**

variety		Rihan	Furat / 1	Jazeera / 1	Local Black barley
Area(hectar)	Demons.	1	1	1	1
	Con.	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk			
	Con.	Seed disk			
Amount of seed kg/ hectar	Demons.	120			
	Con.	120			
Date of sowing	Demons.	4/1/2006			
	Con.	4/1/2006			
Seeder type.	Demons.	Iraqian seeder			
	Con.	Iraqian seeder			
Fertilizer kg/ hectar	Demons.	32 DAP. 160 Urea. 20 Potassium sulfate.			
	Con.	200 compound / 80 Urea. N-P 18 * 18 /			
Protection	Demons.	protection of weed leaves by lantor.			
	Con.	Non .			

**Table ( E – 4 )**

**Location : AL Hamdania**

**Rain zone : MRA**

**Farmer name : Abas Saber Ali**

**Village : AL Twajna**

**Total annual rain fall : 548 mm**

**soil texture: clay**

**soil fertility : k 486 ppm**

**soil fertility : p 7,56 ppm**

**Crop name..... Lentil .....**

variety		IPA / 98	Baraka	Iraqian lentil
Area(hectar)	Demons.	3	1	1
	Con.	-	-	1
Ploughing	Demons.	Seed disk		
	Con.	-	-	Seed disk
Amount of seed kg/ hectar	Demons.	100		
	Con.	-	-	100
Date of sowing	Demons.	6/1/2006		
	Con.	-	-	6/1/2006
Seeder type.	Demons.	Iraqian seeder		
	Con.	-	-	Iraqian seeder
Fertilizer kg/ hectar	Demons.	60 DAP. 20 Urea.		
	Con.	-		
Protection	Demons.	protection of narrow weed leafs by fuzlised.		
	Con.	Non.		
Notes	Using of hand grazing to minimize of mossy plants .			

**Table ( E – 5 )****Location : AL Hamdania****Rain zone : MRA****Farmer name : Abas Saber Ali****Village : AL Twajna****Total annual rain fall : 548 mm****soil texture: clay****soil fertility : k 486 ppm****soil fertility : p 7,56 ppm****Crop name..... Chickpea .....**

variety		Ghab / 4	IPA / 510
Area(hectar)	Demons.	2	1
	Con.	2	-
Ploughing	Demons.	Seed disk	
	Con.	Seed disk	
Amount of seed kg/ hectar	Demons.	100	
	Con.	100	
Date of sowing	Demons.	18/1/2006	
	Con.	18/1/2006	
Seeder type.	Demons.	Handing disseminated	
	Con.	Handing disseminated	
Fertilizer kg/ hectar	Demons.	60 DAP. 20 Urea.	
	Con.	Non.	
Protection	Demons.	protection of narrow weed leafs by fuzlised.	
	Con.	Non.	
Notes			

**Table ( E – 6 )**

**Location : AL Hamdania**

**Rain zone : MRA**

**Farmer name : Abas Saber Ali**

**Village : AL Twajna**

**Total annual rain fall : 548 mm**

**soil texture: clay**

**soil fertility : k 486 ppm**

**soil fertility : p 7,56 ppm**

**Crop name..... Forage lequems .....**

variety		Forage group	Kuhak
Area(hectar)	Demons.	1	0,5
	Con.	-	-
Ploughing	Demons.	Disk + smoothing	
	Con.	-	
Amount of seed kg/ hectar	Demons.	100 Bekia + 25 Barley	100
	Con.	-	
Date of sowing	Demons.	18/1/2006	
	Con.	-	
Seeder type.	Demons.	Handing disseminated	
	Con.	-	
Fertilizer kg/ hectar	Demons.	60 DAP . 20 Urea.	
	Con.	-	
Protection	Demons.	Non.	
	Con.	-	
Notes			

**Table ( K – 1 )**

**Location : Hummaidat**

**Rain zone : SI**

**Farmer name : Moyasir Nori Abdulla**

**Village : Dabona**

**Total annual rain fall: 391 mm**

**soil texture: clay**

**soil fertility : k 1361 ppm**

**soil fertility : p 30,1 ppm**

**Crop name.....Triticum aestivum .....**

variety		Tell Affer /3	Cham / 6	Abo Ghraib 3	Adnania	Cham / 4
Area(hectar)	Demons.	2	2	2	2	2
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	disk				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	4/1/2006	2/1/2006	3/1/2006	3/1/2006	2/1/2006
	Con.	7/1/2006	7/1/2006	7/1/2006	6/1/2006	6/1/2006
Seeder type.	Demons.	Kaspardo				
	Con.	Seed disk				
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.				
	Con.	80 DAP. 60 Urea.				
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar.				
	Con.	Non.				

**Table ( K – 2)**

**Location : Hummaidat**

**Rain zone : SI**

**Farmer name : Moyasir Nori Abdulla**

**Village : Dabona**

**Total annual rain fall: 391 mm**

**soil texture: clay**

**soil fertility : k 1361 ppm**

**soil fertility : p 30,1 ppm**

**Crop name..... Durum Wheat .....**

variety		Om Rabaa	Cham / 3	karonia	Waha
Area(hectar)	Demons.	2	2	2	2
	Con.	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk			
	Con.	disk			
Amount of seed kg/ hectar	Demons.	140			
	Con.	140			
Date of sowing	Demons.	5/1/2006	4/1/2006	5/1/2006	6/1/2006
	Con.	7/1/2006			
Seeder type.	Demons.	Kaspardo			
	Con.	Seed disk			
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.			
	Con.	80 DAP. 60 Urea.			
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar			
	Con.	Non.			

Table( L – 1 )

Location : AL Nimrud

Rain zone : SI

Farmer name : Sinan AL Jalili

Village : city of region

Total annual rain fall: 390 mm

soil texture: clay

soil fertility : k 581 ppm

soil fertility : p 6,3 ppm

Crop name.....Triticum aestivum .....

variety		Tell Affer /3	Cham / 3	Abo Ghraib 3	Adnania	Cham / 4
Area(hectar)	Demons.	2	2	2	2	2
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	hoe				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	30/12/2005				
	Con.	30/12/2005				
Seeder type.	Demons.	Rama				
	Con.	Rama				
Fertilizer kg/ hectar	Demons.	72 DAP. 160 Urea. 32 Potassium sulfate.				
	Con.	72 DAP. 280 Urea. 32 Potassium sulfate.				
Protection	Demons.	protection of narrow and wide weed leafs by shivalia , protection of sowna by jeam and karati .				
	Con.	protection of narrow and wide weed leafs by shivalia , protection of sowna by jeam and karati .				
Notes	Amount of SI= 80 mm.					

Table( L – 2)

Location : AL Nimrud

Rain zone : SI

Farmer name : Sinan AL Jalili

Village : city of region

Total annual rain fall: 390 mm

soil texture: clay

soil fertility : k 581 ppm

soil fertility : p 6,3 ppm

Crop name..... Durum Wheat .....

variety		Tell Affer /3	Cham / 3	karonia	Waha
Area(hectar)	Demons.	2,5	2,5	2,5	2,5
	Con.	1,25	1,25	1,25	1,25
Ploughing	Demons.	Chisel + smoothing disk			
	Con.				
Amount of seed kg/ hectar	Demons.	140			
	Con.	140			
Date of sowing	Demons.	29/12/2005	23/12/2005	23/12/2005	29/12/2005
	Con.	29/12/2005	23/12/2005	23/12/2005	29/12/2005
Seeder type.	Demons.	Rama			
	Con.	Rama			
Fertilizer kg/ hectar	Demons.	72 DAP. / 160 Urea. / 32 Potassium sulfate.			
	Con.	72 DAP. / 280 Urea. / 32 Potassium sulfate.			
Protection	Demons.	protection of narrow and wide leafs weed by shivalia , protection of sowna by jeam and karati .			
	Con.	protection of narrow and wide weed leafs by shivalia , protection of sowna by jeam and karati .			
Notes					

**Table ( j – 1 )**

**Location : Rabeea**

**Rain zone : SI**

**Farmer name : Swylim Sulbi Ghadir**

**Village : Tell Asmyer**

**Total annual rain fall: 279 mm**

**soil texture: silty clay**

**soil fertility : k 913 ppm**

**soil fertility : p 9,16 ppm**

**Crop name.....Triticum aestivum .....**

variety		Tell Affer /3	Cham / 6	Abo Ghraib/ 3	Adnania	Cham / 4
Area(hectar)	Demons.	2	2	2	2	2
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	Seed disk				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	20/2/2005				
	Con.	25/2/2005				
Seeder type.	Demons.	Iraqian seeder				
	Con.	Iraqian seeder				
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.				
	Con.	80 DAP. 60 Urea.				
Protection	Demons.	-				
	Con.	-				
Notes						

**Table (j - 2)**

**Location: Rabeea**

**Rain zone : SI**

**Farmer name: Swylim Sulbi Ghadir**

**Village: Tell Asmyer**

**Total annual rain fall: 279 mm**

**soil texture: silty clay**

**soil fertility : k 913 ppm**

**soil fertility : p 9,16 ppm**

**Crop name..... Durum wheat .....**

variety		Om Rabeea	Cham / 3	karonia	Waha
Area(hectar)	Demons.	2	2	2	2
	Con.	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk			
	Con.	Seed disk			
Amount of seed kg/ hectar	Demons.	140			
	Con.	140			
Date of sowing	Demons.	20/2/2006			
	Con.	25/2/2006			
Seeder type.	Demons.	Iraqian seeder			
	Con.	Iraqian seeder			
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.			
	Con.	80 DAP. 60 Urea.			
Protection	Demons.	protection of weed by kranstar.			
	Con.	Non.			
Notes					

**Table ( H – 1 )**

**Location : Rabeea**

**Rain zone : HRA**

**Farmer name : Abd AL Hamid M. Hassan**

**Village : AL QAHRRA**

**Total annual rain fall: 279 mm**

**soil texture: silty clay**

**soil fertility : k 676 ppm**

**soil fertility : p 3 ppm**

**Crop name.....Triticum aestivum .....**

variety		Abo Ghraib / 3	Cham / 6	Cham / 4
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk		
Amount of seed kg/ hectar	Demons.	120		
	Con.	120		
Date of sowing	Demons.	26/2/2006		
	Con.	26/2/2006		
Seeder type.	Demons.	John sheer		
	Con.	John sheer		
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.		
	Con.	80 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & lantor		
	Con.	protection of narrow and wide weed leafs by topic & lantor		
Notes				

**Table ( H – 2)**

**Location : Rabeea**

**Rain zone : HRA**

**Farmer name : Abd AL Hamid M. Hassan**

**Village : AL QAHRRA**

**Total annual rain fall: 279 mm**

**soil texture: silty clay**

**soil fertility : k 676 ppm**

**soil fertility : p 3 ppm**

**Crop name..... Durum Wheat .....**

variety		Waha	Cham / 3	Karonia
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk		
Amount of seed kg/ hectar	Demons.	140		
	Con.	140		
Date of sowing	Demons.	26/2/2006		
	Con.	26/2/2006		
Seeder type.	Demons.	John sheer		
	Con.	John sheer		
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.		
	Con.	80 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & lantor		
	Con.	protection of narrow and wide weed leafs by topic & lantor		
Notes				

**Table ( I – 1 )**

**Location : AL Shikhan**

**Rain zone : HRA**

**Farmer name : Ali Abdi Hassan**

**Village : Kirkhalus**

**Total annual rain fall: 852 mm**

**soil texture: silty clay**

**soil fertility : k 444,4 ppm**

**soil fertility : p 6,28 ppm**

**Crop name.....Triticum aestivum .....**

variety		Abo Ghraib / 3	Cham / 6	Cham / 4
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk + smoothing		
Amount of seed kg/ hectar	Demons.	120		
	Con.	120		
Date of sowing	Demons.	1/3/2006		
	Con.	1/3/2006		
Seeder type.	Demons.	Kaspardo		
	Con.	Kaspardo		
Fertilizer kg/ hectar	Demons.	56 DAP. 80 Urea. 32 Potassium sulfate.		
	Con.	160 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by finmak.		
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by finmak.		
Notes				

Table ( I – 2)

Location : AL Shikhan

Rain zone : HRA

Farmer name : Ali Abdi Hassan

Village : Kirkhalus

Total annual rain fall: 852 mm

soil texture: silty clay

soil fertility : k 444,4 ppm

soil fertility : p 6,28 ppm

Crop name..... Durum wheat .....

variety		Waha	Cham / 3	Karonia
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	Seed disk + smoothing		
Amount of seed kg/ hectar	Demons.	140		
	Con.	140		
Date of sowing	Demons.	1/3/2006		
	Con.	1/3/2006		
Seeder type.	Demons.	Kaspardo		
	Con.	Kaspardo		
Fertilizer kg/ hectar	Demons.	56 DAP. 80 Urea. 32 Potassium sulfate.		
	Con.	160 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by finmak.		
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by finmak.		
Notes				

**Table ( I – 3)**

**Location : AL Shikhan**

**Rain zone : HRA**

**Farmer name : Ali Abdi Hassan**

**Village : Kirkhalus**

**Total annual rain fall: 852 mm**

**soil texture: silty clay**

**soil fertility : k 444,4 ppm**

**soil fertility : p 6,28 ppm**

**Crop name..... Faba bean .....**

<b>variety</b>		<b>Akwadlgy</b>
<b>Area(hectar)</b>	<b>Demons.</b>	<b>1</b>
	<b>Con.</b>	<b>-</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>Seed disk</b>
	<b>Con.</b>	<b>-</b>
<b>Amount of seed kg/ hectar</b>	<b>Demons.</b>	<b>80</b>
	<b>Con.</b>	<b>-</b>
<b>Date of sowing</b>	<b>Demons.</b>	<b>25/2/2006</b>
	<b>Con.</b>	<b>-</b>
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing disseminated</b>
	<b>Con.</b>	<b>-</b>
<b>Fertilizer kg/ hectar</b>	<b>Demons.</b>	<b>60 DAP. 20 Urea.</b>
	<b>Con.</b>	<b>-</b>
<b>Protection</b>	<b>Demons.</b>	<b>protection of weed by fuzelised .</b>
	<b>Con.</b>	<b>-</b>
<b>Notes</b>		

**Table ( I – 4)**

**Location : AL Shikhan**

**Rain zone : HRA**

**Farmer name : Ali Abdi Hassan**

**Village : Kirkhalus**

**Total annual rain fall: 852 mm**

**soil texture: silty clay**

**soil fertility : k 444,4 ppm**

**soil fertility : p 6,28 ppm**

**Crop name.....Chickpea .....**

<b>Variety</b>		<b>Dajla</b>	<b>IPA/ 510</b>	<b>Ghab / 4</b>
<b>Area(hectar)</b>	<b>Demons.</b>	<b>0,5</b>	<b>1</b>	<b>2</b>
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>2</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>Seed disk</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>Seed disk</b>
<b>Amount of seed kg/ hectar</b>	<b>Demons.</b>	<b>100</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>100</b>
<b>Date of sowing</b>	<b>Demons.</b>	<b>25/2/2006</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>25/2/2006</b>
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing disseminated</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>Handing disseminated</b>
<b>Fertilizer kg/ hectar</b>	<b>Demons.</b>	<b>60 DAP. 20 Urea.</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>Non.</b>
<b>Protection</b>	<b>Demons.</b>	<b>protection of weed by fuzelised .</b>		
	<b>Con.</b>	<b>-</b>	<b>-</b>	<b>Non.</b>
<b>Notes</b>				

**Table ( B - 1 )****Location : Tel Abta****Rain zone : LRA****Farmer name : Nawaf Hamid AL Mutlak****Village : Youztaba****Total annual rain fall : 276 mm****soil texture : silty clay loam****Crop name..... barley .....**

variety		Local black barley	Tadmor	Zanbaka
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing		
	Con.	Seeder disk		
Amount of seed kg/ hectar	Demons.	120	100	120
	Con.	120		
Date of sowing	Demons.	5/12/2005		
	Con.	5/12/2005		
Seeder type.	Demons.	Nardy		
	Con.	Seed disk		
Fertilizer kg/ hectar	Demons.	40 Urea.		
	Con.	-		
Protection	Demons.	-		
	Con.	-		

**Table ( B - 2 )**

**Location : Tell Abta**

**Rain zone : LRA**

**Farmer name : Nawaf Hamid AL Mutlak**

**Village : Youztaba**

**Total annual rain fall : 276 mm**

**soil texture : silty clay loam**

**Crop name.....Forage mixture .....**

variety		Kuhak	IPA / 2001
Area(hectar)	Demons.	1	5
	Con.	-	-
Ploughing	Demons.	Iraqian disk	
	Con.	-	
Amount of seed kg/ hectar	Demons.	100 Bekia + 20 kuhak	100 Bekia + 20 Barley
	Con.	-	
Date of sowing	Demons.	30/11/2005	
	Con.	-	
Seeder type.	Demons.	Joudeer seed disk	
	Con.	-	
Fertilizer kg/ hectar	Demons.	40 Urea.	
	Con.	-	
Protection	Demons.	-	
	Con.	-	

Table( D - 1 )

Location : Tel kief

Rain zone : MRA

Farmer name : Mohammed Ali Najam

Village : Tell Yabis

Total annual rain fall : 470,5 mm

soil texture: clay

soil fertility : k 462 ppm

soil fertility : p 6,73 ppm

Crop name..... Triticum aestivum .....

variety		Tell affer / 3	Abo Ghraib / 3	IPA / 99	Adnania	Cham / 6
Area(hectar)	Demons.	1	1	1	1	1
	Con.	1	1	1	1	1
Ploughing	Demons.	Chisel + smoothing disk				
	Con.	disk + hoe				
Amount of seed kg/ hectar	Demons.	120				
	Con.	120				
Date of sowing	Demons.	1/2/2006				
	Con.	1/2/2006				13/2/2006
Seeder type.	Demons.	Rama				
	Con.	Seed disk				
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.				
	Con.	160 DAP. 80 Urea.				
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial.				
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sedial.				

Table( D - 2 )

Location : Tel kief

Rain zone : MRA

Farmer name : Mohammed Ali Najam

Village : Tell Yabis

Total annual rain fall : 470,5 mm

soil texture: clay

soil fertility : k 462 ppm

soil fertility : p 6,73 ppm

Crop name..... Durum Wheat .....

Variety		Cham / 5	Karonia	Om Rabiaa
Area(hectar)	Demons.	1	1	1
	Con.	1	1	1
Ploughing	Demons.	Chisel + smoothing disk		
	Con.	disk + hoe		
Amount of seed kg/ hectar	Demons.	140		
	Con.	140		
Date of sowing	Demons.	2/2/2006		
	Con.	2/2/2006		
Seeder type.	Demons.	Rama		
	Con.	Seed disk		
Fertilizer kg/ hectar	Demons.	56 DAP. 160 Urea. 32 Potassium sulfate.		
	Con.	160 DAP. 80 Urea.		
Protection	Demons.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sorial.		
	Con.	protection of narrow and wide weed leafs by topic & kranstar protection of sowna insect by sorial.		

Table( D - 3 )

Location : Tel kief

Rain zone : MRA

Farmer name : Mohammed Ali Najam

Village : Tell Yabis

Total annual rain fall : 470,5 mm

soil texture: clay

soil fertility : k 462 ppm

soil fertility : p 6,73 ppm

Crop name..... Barley .....

variety		Furat	Rihan	Jazzera	Local black barley
Area(hectar)	Demons.	1	1	1	1
	Con.	1	1	1	1
Ploughing	Demons.	smoothing disk			
	Con.	smoothing disk			
Amount of seed kg/ hectar	Demons.	120			
	Con.	120			
Date of sowing	Demons.	6/1/2006			
	Con.	6/1/2006			
Seeder type.	Demons.	Seed disk			
	Con.	Seed disk			
Fertilizer kg/ hectar	Demons.	32 DAP. 160 Urea. 20 Potassium sulfate.			
	Con.	160 DAP. 80 Urea.			
Protection	Demons.	protection of narrow and wide weed leafs by locsan & kranstar			
	Con.	protection of narrow and wide weed leafs by locsan & kranstar			

**Table( D - 4 )**

**Location : Tel kief**

**Rain zone : MRA**

**Farmer name : Mohammed Ali Najam**

**Village : Tell Yabis**

**Total annual rain fall : 470,5 mm**

**soil texture: clay**

**soil fertility : k 462 ppm**

**soil fertility : p 6,73 ppm**

**Crop name..... Lentil .....**

<b>Variety</b>		<b>IPA / 98</b>	<b>Baraka</b>
<b>Area(hectar)</b>	<b>Demons.</b>	<b>3</b>	<b>1</b>
	<b>Con.</b>	<b>-</b>	<b>-</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>smoothing disk</b>	
	<b>Con.</b>	<b>-</b>	
<b>Amount of seed kg/ hectar</b>	<b>Demons.</b>	<b>100</b>	<b>100</b>
	<b>Con.</b>	<b>-</b>	
<b>Date of sowing</b>	<b>Demons.</b>	<b>13/2/2006</b>	
	<b>Con.</b>	<b>-</b>	
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing sowing</b>	
	<b>Con.</b>	<b>-</b>	
<b>Fertilizer kg/ hectar</b>	<b>Demons.</b>	<b>60 DAP. 20 Urea.</b>	
	<b>Con.</b>	<b>-</b>	
<b>Protection</b>	<b>Demons.</b>	<b>protection of weed by fuzelised</b>	
	<b>Con.</b>	<b>-</b>	

**Table( D - 5 )**

**Location : Tel kief**

**Rain zone : MRA**

**Farmer name : Mohammed Ali Najam**

**Village : Tell Yabis**

**Total annual rain fall : 470,5 mm**

**soil texture: clay**

**soil fertility : k 462 ppm**

**soil fertility : p 6,73 ppm**

**Crop name..... Chickpea .....**

variety		Dajla	CHAB / 4
Area(hectar)	Demons.	0,5	2
	Con.	0,5	2
Ploughing	Demons.	Disk + smoothing	
	Con.	-	Disk + smoothing
Amount of seed kg/ hectar	Demons.	100	-
	Con.	-	100
Date of sowing	Demons.	13/2/2006	
	Con.	-	13/2/2006
Seeder type.	Demons.	Handing sowing	
	Con.	-	Handing sowing
Fertilizer kg/ hectar	Demons.	60 DAP. 20 Urea.	
	Con.	80 DAP.	
Protection	Demons.	protection of weed by fuzelised	
	Con.	-	protection of weed by fuzelised

**Table( D - 6 )**

**Location : Tel kief**

**Rain zone : MRA**

**Farmer name : Mohammed Ali Najam**

**Village : Tell Yabis**

**Total annual rain fall : 470,5 mm**

**soil texture: clay**

**soil fertility : k 462 ppm**

**soil fertility : p 6,73 ppm**

**Crop name..... forage Bekia .....**

variety		2001
Area(hectar)	Demons.	1
	Con.	-
Ploughing	Demons.	Disk + smoothing
	Con.	-
Amount of seed kg/ hectar	Demons.	100 Bekia / 20 barely
	Con.	-
Date of sowing	Demons.	13/2/2006
	Con.	-
Seeder type.	Demons.	Rama seeder
	Con.	-
Fertilizer kg/ hectar	Demons.	60 DAP. 20 Urea.
	Con.	-
Protection	Demons.	-
	Con.	-

**Table( D - 7 )**

**Location : Tel kief**

**Rain zone : MRA**

**Farmer name : Mohammed Ali Najam**

**Village : Tell Yabis**

**Total annual rain fall : 470,5 mm**

**soil texture: clay**

**soil fertility : k 462 ppm**

**soil fertility : p 6,73 ppm**

**Crop name..... Vetch .....**

<b>Variety</b>		<b>Ali Bar</b>	<b>Variety 587</b>
<b>Area(hectar)</b>	<b>Demons.</b>	<b>0,5</b>	<b>0,5</b>
	<b>Con.</b>	<b>-</b>	<b>-</b>
<b>Ploughing</b>	<b>Demons.</b>	<b>Disk + smoothing</b>	
	<b>Con.</b>	<b>-</b>	
<b>Amount of seed kg/ hectar</b>	<b>Demons.</b>	<b>100</b>	
	<b>Con.</b>	<b>-</b>	
<b>Date of sowing</b>	<b>Demons.</b>	<b>13/2/2006</b>	
	<b>Con.</b>	<b>-</b>	
<b>Seeder type.</b>	<b>Demons.</b>	<b>Handing sowing</b>	
	<b>Con.</b>	<b>-</b>	
<b>Fertilizer kg/ hectar</b>	<b>Demons.</b>	<b>60 DAP. 20 Urea.</b>	
	<b>Con.</b>	<b>-</b>	
<b>Protection</b>	<b>Demons.</b>	<b>protection of narrow weed leafs by fuzelised</b>	
	<b>Con.</b>	<b>-</b>	