

Brassica spp.

**	**	*	*
	.	-	-
			.
			*
			**

2008 -2007

RCBD

[Control	Hand-weeding	Fusilad Forte	Diclofop-methyl	Trifluralin]
	[Srew	Star	Pactol]	
		. 3	6	² 9

7.8)	(121.76)	%50	Trifluralin
(1 ⁻	.	7.5)	(1 ⁻	(1 ⁻
			² . 6.42)	
			.(4.9)	(² 783.1)
			Pactol	
6.63)	(1 ⁻	8.0)	(122.22)
.(5.2)	(²	488.6)	(1 ⁻	(1 ⁻
			. 6.8)	² .
			Pactol	
(1 ⁻	² .	6.76)	(1 ⁻	8.3)
			.(5.9)	(² 940.7)
				Trifluralin
				Pactol
				.Trifluralin

(27.450) 2007
 .(2008 Anonymous) ¹⁻ . (1.78)

. 2010 / 9 / 23
 . 2011 / 3 / 23

.(2006 Brian)

(Biodeasel)

Canola (1990)

OKANOLA)
(1997 Mckey Breglund)

3-
%37 .(2007

.(2002)

.(2003 Khan)
) %77

%50-15.8

.(2003 Ihsanullah Khan) (2000

2008 -2007

Diclofop- Trifluralin]
Pactol]

split plot design

[Fusilad Forte methyl
.[Srew Star

(3× 3)² 9

1

40

3

(4 -3)

.(2003)²⁻

62.5

4

(N % 46)¹⁻

240

.(2003)¹⁻ .P2O5 155

(P2O5 45%)

Pactol, Star, Srew

0.2 Diclofop-methyl¹⁻

2.4

Trifluralin

Weed)
400
(5)
1- . 3 Fusilad Forte
()
1- (Free
Trifluralin
(Diclofop-methyl)
1-

%50
(²)

25 50%
(1973 Scoot)

(LAI)

1- . (1- .)
(1988 Alchalabi) 48 80
(² .) 1- .²- . (CGR)
(1967 Radford) 50%

L.S.D

(0.05)

(. .)

(1990)

-: 50%

-1

50%

(1)

121.76

Trifluralin

Fusilad Forte

Diclofop-methyl

117.23

(2002) Rola Frank (2000) Acker
50%

Star Pactol

119.2

Srew

120.42 122.22

Hamze (2006)

(2003)

Sharief

(2007)

(2006)

Sim

(2007)

50%

(2000)

120.0 Srew
123.0 124.0 Star Pactol

.(7)

50%

.1

	50%			
	Srew	Star	Pactol	
121.76	120.7	122.0	122.6	Trifluralin
121.43	120.7	121.0	122.6	Diclofop-methyl
120.3	119.3	119.0	122.6	Fusilad Forte
122.33	120.0	123.0	124.0	Weed - Free
117.23	115.1	117.3	119.7	Weedy (Check)
1.5	2.1			0.05 . . .
	119.2	120.42	122.22	
	0.9			0.05 . . .

1-

50%

-2

.(2) 1-

7.0 7.8

1-

5.2

Fusilad Diclofop-methyl Trifluralin

1-

7.4

29.8% 25.8% 33.4%

(2007)

Sim (2003) Ihsanulla Khan (2003)

(1990)

Shah

Lutman

.(7)

Srew Star

15.0% 9.5%

Pactol

1- . 8.0

Srew Star

Landsberg

(1977) Cutting

80% 5-4

(2)

Weed-Free Srew Star Pactol
 1- . 8.9 8.9 10.4
 1- . 3.7 6.0 6.0
 . 58.5% 32.6% 42.4%

1- . 2
 . 50%

	Srew	Star	Pactol	
7.8	7.5	7.7	8.3	Trifluralin
7.0	6.4	6.9	7.8	Diclofop-methyl
7.4	7.5	7.3	7.4	Fusilad Forte
9.4	8.9	8.9	10.4	Weed - Free
5.2	3.7	6.0	6.0	Weedy (Check)
0.1	0.4			0.05 . . .
8.0	6.8	7.3	8.0	
0.2				0.05 . . .

50% 1- 2- . (CGR) -3
 (3) 1- 2- .

Fusilad Forte Diclofop-methyl Trifluralin
 1- 2- . 6.11 5.87 6.42
 27.16% 24.19% 30.86% 1- 2- . 4.45

(2002) Blackshaw (2008) Zhang
 Srew Star Pactol Pactol

(2007)

Sim (2006)

(3)

Weed-Free

Srew

Star

Pactol

58.5%

32.6%

42.4%

1- 2-

.3

50%

	Srew	Star	Pactol	
6.42	6.21	6.31	6.76	Trifluralin
5.87	5.30	5.70	6.63	Diclofop-methyl
6.11	6.11	6.11	6.11	Fusilad Forte
7.67	7.41	7.23	8.38	Weed - Free
4.45	3.21	5.12	5.29	Weedy (Check)
0.1	0.3			0.05 . .
	5.64	6.09	6.63	
	0.2			0.05 . .

-4

(4)

Trifluralin

1-

5.6

1-

7.5

Trifluralin

(7)

(2000)

1-

7.3

Star

1-

6.6

Srew

Pactol

(1)

(2003)

(2000) Sharief

Weed Free

1-

4

	Srew	Star	Pactol	
7.5	8.0	8.1	6.5	Trifluralin
6.5	6.0	6.6	6.8	Diclofop-methyl
6.7	6.8	6.8	6.4	Fusilad Forte
8.3	8.0	8.9	8.1	Weed - Free
5.6	4.3	6.3	6.1	Weedy (Check)
0.7	1.1			0.05 . .
	6.6	7.3	6.8	
	0.5			0.05 . .

(²)

-5

(5)

783.1

Trifluralin

(²)

²

529.0

²

32.4%

CO₂

(4)

(2007)

Sim

PAR)

(Photosynthesis Active Radiation

)

26.85%

12.19%

Srew

Star

Pactol

(7

Sim (2006)

Sim (2003)

(2000) Sharief

(2007)

Pactol

Srew

Star

Pactol

Robertson

(2002)

(2)

. 5

	Srew	Star	Pactol	
783.1	628.2	780.5	940.7	Trifluralin
720.2	543.3	756.2	861.2	Diclofop-methyl
724.8	697.2	718.7	758.5	Fusilad Forte
916.3	841.5	938.9	968.4	Weed - Free
529.0	378.6	513.5	694.8	Weedy (Check)
12.7	24.3			0.05 . .
	617.8	741.6	844.6	
	12.0			0.05 . .

-6

4.9 Fusilad Forte Diclofop-methyl Trifluralin

3.3

4.6 4.5

28.3% 26.6% 32.6%

.(6

)

(5)

Harker

(2000)

Budzyhska

Jankowski

(2000) Booth

(2005)

Degenhard

(2004)

5

25.0%

6.9%

Srew

Star

Pactol

(5)

Pactol

Srew

(6)

(2006)

(2003)

(2000) Sharief

.6

	Srew	Star	Pactol	
4.9	3.9	4.9	5.9	Trifluralin
4.5	3.4	4.7	5.5	Diclofop-methyl
4.6	4.5	4.5	4.7	Fusilad Forte
5.7	5.3	5.9	6.0	Weed - Free
3.3	2.4	3.2	4.3	Weedy (Check)
0.1	0.2			0.05 . .
	3.9	4.7	5.2	
	0.1			0.05 . .

.2003.

(Brassica napus L.)

.1990.

.488

.2002.

(rassica napus L.)

.2006.

.2000.

5

-1

.19 - 10

.1990.

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RESPONSE THREE GENOTYPES OF RAPESEED TO WEED CONTROL AND EFFECT OF THAT ON GROWTH CHARACTERISTICS .

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ABSTRACT

A field trial was conducted at experiment farm of Diyala Agriculture directorate in winter season 2007 – 2008. The objectives were to investigate the effect of herbicides [Trifluralin, Diclofop-methyl, Fusilad Forte, Hand-weeding and Control] on growth characteristics of three genotypes of (*Brassica spp*) [Pactol, Star, Srew]. The experiment was arranged in a split plot design within three replications. Herbicides were arranged in the main plots and genotypes in sub plots.

The results showed that significant different between herbicides treatments, Trifluralin gave high means in days from planting to 50% flowering (121.76 day), dry matter of rapeseed (7.8 t.h^{-1}), crop growth rate ($6.42 \text{ gm.m}^{-2}.\text{day}$), number of primary branches ($7.5 \text{ branch.plant}^{-1}$), leaf area (783.1 cm^{-2}) and leaf area index (4.9).

Genotype Pactol gave more days from planting to 50% flowering (122.22day), dry matter of rapeseed (8.0 t.h^{-1}), crop growth rate ($6.63 \text{ gm.m}^{-2}.\text{day}$), number of primary branches ($6.8 \text{ branch. plant}^{-1}$), leaf area (488.6 cm^{-2}) and leaf area index (5.2).. There was signification interaction between herbicides and genotypes for all traits. Genotype Pactol with trifluralin produced highest dry matter of rapeseed (8.3 t.h^{-1}), crop growth rate ($6.76 \text{ gm. m}^{-2}.\text{day}$), leaf area (940.7 cm^{-2}) and leaf area index (5.9)..