

4

2

168 (2549) (2549)

-

5

3 30
26 86.67 (4.1)

4.1

(. . 2549)

30

26

86.67

2

(2549)

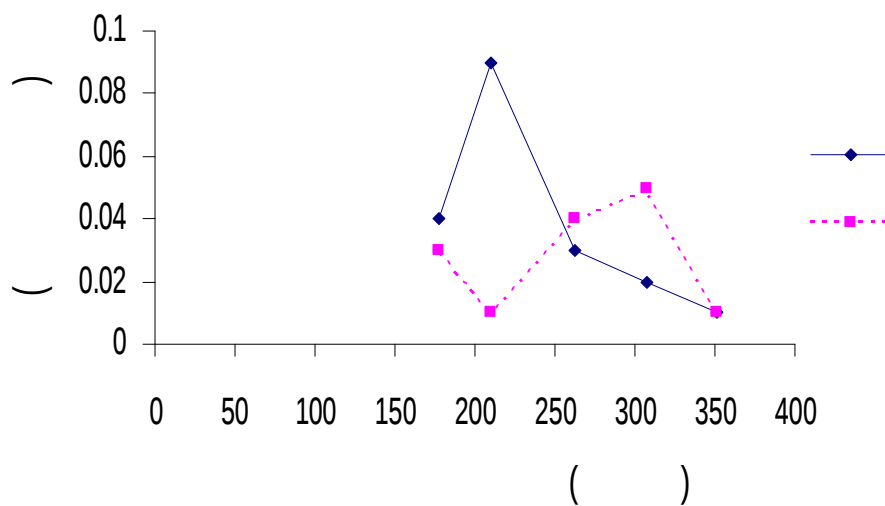
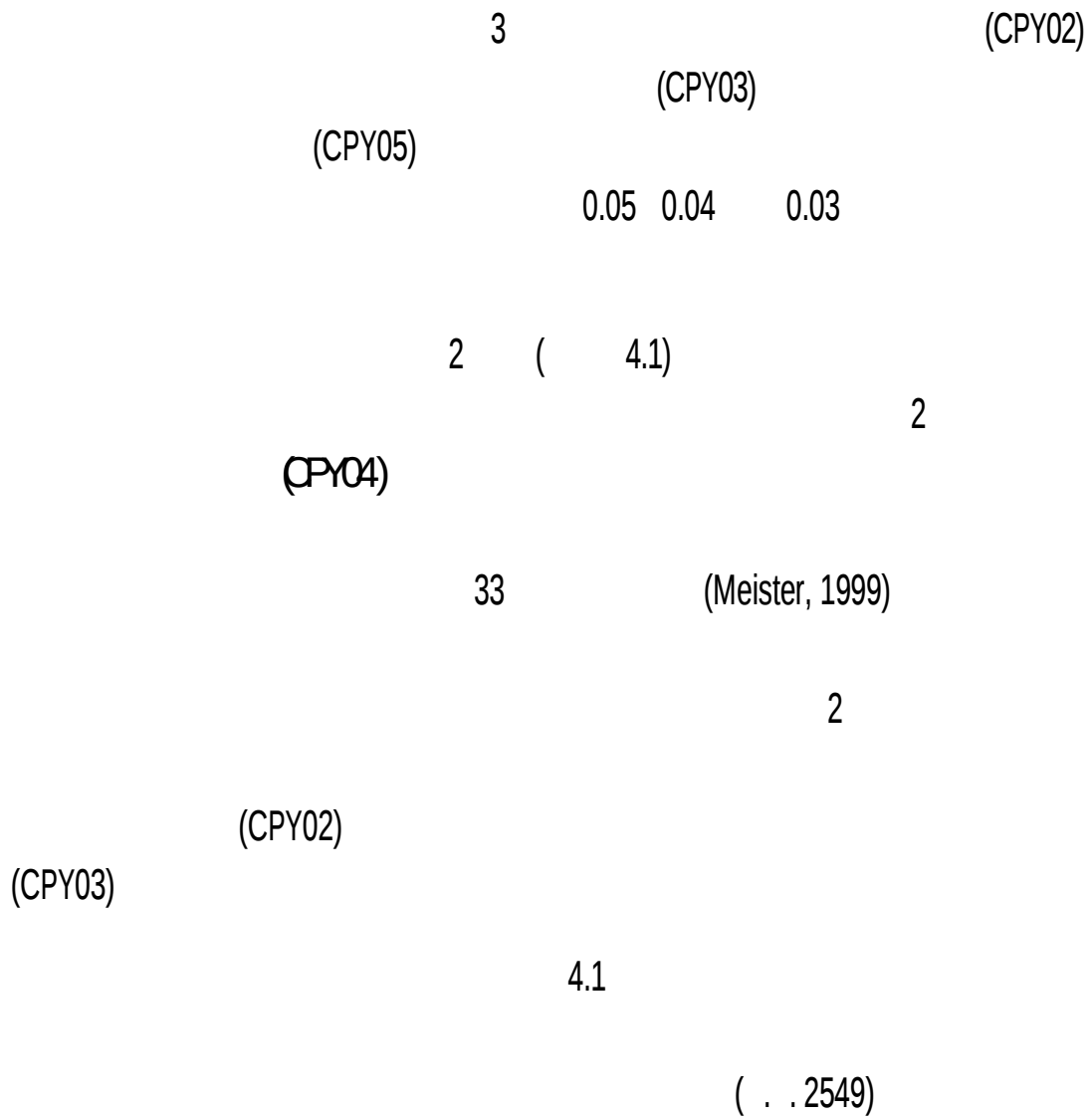
(2549)

5

3

30

(	4.2)			
		0.01-0.09		
0.04				
3			(CPY04)	
		(CPY05)		
(CPY03)				
	0.09	0.04	0.03	
		4.2		
			(	)
			(	2549)
			(	2549)
			(	)
			(	)
CPY01		351	001	001
CPY02		308	0.02	0.05
CPY03		263	0.03	0.04
CPY04		210	009	001
CPY05		177	0.04	0.03
			0.09	0.05
			0.01	0.01
			0.04	0.03



				3
	3	2	(	2549)
(	2549)		18	
8		44.44	(	4.3)
		4.3		
		(	. .	2549)
		18	8	44.44
		2	(	2549)
(	2549)	3	3	18
(	4.4)			
		0.41		
0.23				
		(SKK02)		
	(SKK01)			

0.41 0.05

(SKK03)

4.4

()

(2549)

(2549)

()

()

SKK01	16	0.05	0.01
SKK02	12	0.41	0.12
SKK03	9	N.D.	0.03
		0.41	0.12
		N.D.	0.01
		0.23	0.05

: N.D.: Not detecable ()

(SKK02)

(SKK03)

0.12 0.03

2

(SKK03)

33

(Meister, 1999)

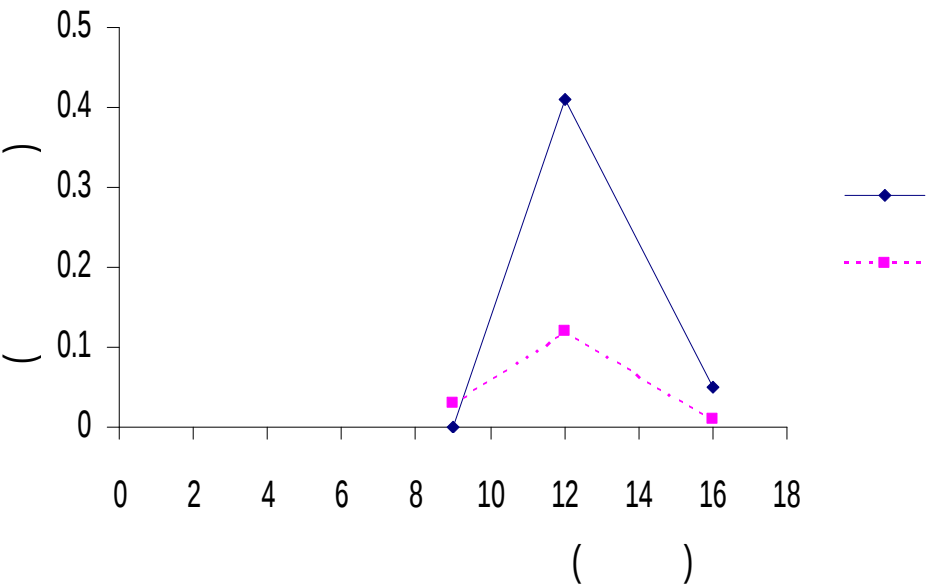
(4.2)

(SKK02)

(SKK01) 4

4.2

(. . 2549)



6

3 2 (2549) (

62

2549) 36 24

66.67 (4.5)

4.5

(. . 2549)

36 24 66.67

2 (2549)

(2549) 3 3

36
(4.6)

0.01-

0.32 0.11
3

(TS05) (TS01) (TS02)
0.32 0.21 0.09

1.20

0.54

3 (TS07)

(TS05) (TS11)

		1.20 0.89	
0.41			
		4.6	
		()	
		(2549)	
		(2549)	
		()	
		()	
TS01	507	0.21	N.D.
TS02	475	0.09	0.19
TS05	372	0.32	0.89
TS07	224	0.02	1.20
TS10	129	0.01	0.01
TS11	127	0.01	0.41
		0.32	1.20
		0.01	N.D.
		0.11	0.54
N.D.: Not Detectable ()			
		2	
		4	
(TS02)	(TS05)	(TS07)	
	(TS11)		
		(, 2547)	

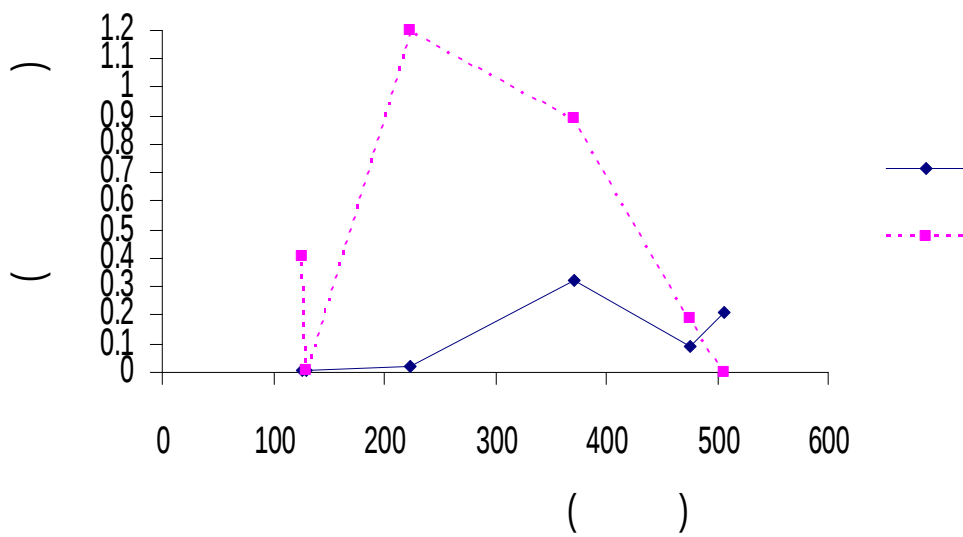
(, 2544)

(4.3)

(2542)

4.3

(. . 2549)



	3		30	
		28		93.33
(4.7)				
		4.7		
		(. . 2549)		
	30	28	93.33	

33 (Hornsby,
 Wauchope and Herner, 1995)

	(, 2528)		(4.8)	
			0.07– 1.32	
		0.39		
		3		
(CPY04)				(CPY01)
		(CPY05)		
	1.32 0.28	0.19		
			0.48 –2.12	
		1.45		
		3		
(CPY03)				(CPY02)

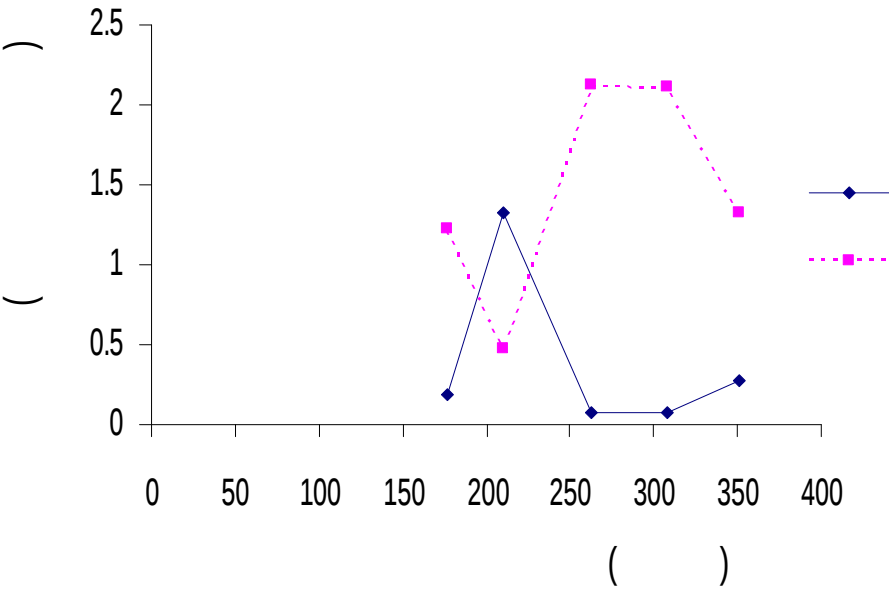
(2549)

$$\left(\begin{array}{c} \text{ } \end{array} \right)$$
$$(\quad)$$

2

4.4

(. . 2549)



(4.4)

60 (, 2545)

(runoff)

(, 2548)

Diagram illustrating the relationship between three sets (A, B, and C) and their intersections, with values provided for each region.

Regions and Values:

- Intersection of A and B: 3
- Intersection of A and C: 94.44
- Intersection of B and C: 17
- Intersection of A, B, and C: 4.9
- Region of A not in B or C: (2549)
- Region of B not in A or C: (2549)
- Region of C not in A or B: (. . 2549)
- Region outside all three sets: 18

(4.10)

0.02 – 0.38

0.21

2 (SKK01)

(SKK03) 0.38 0.24

0.59
2
0.27 – 1.10

69

(SKK02) (SKK01) 1.10
0.39

4.10

()
(2549) (2549)

()

()

SKK01	16	0.38	0.39
SKK02	12	0.02	1.10
SKK03	9	0.24	0.27
		0.38	1.10
		0.02	0.27
		0.21	0.59

2

(soil erosion)

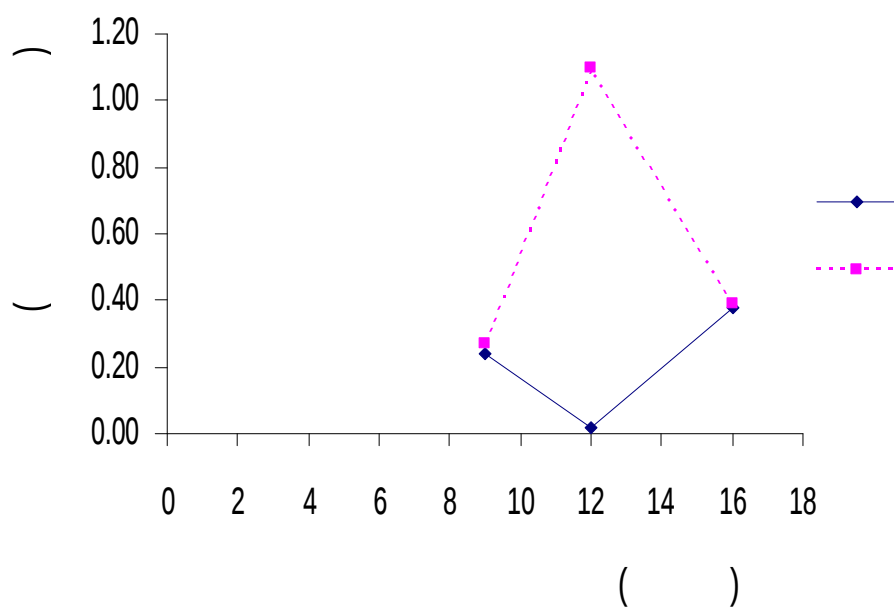
(, 2548)

(4.5)

60 (, 2545)

4.5

(. . 2549)



6 2 (2549) 36
 (2549) 3
 21
 58.33 (4.11)

2

33 (Hornsby, Wauchope and
Herner, 1995)

(, 2528)

(4.6)

(TS10)

(TS11)

4.12

()

(2549)
(2549)

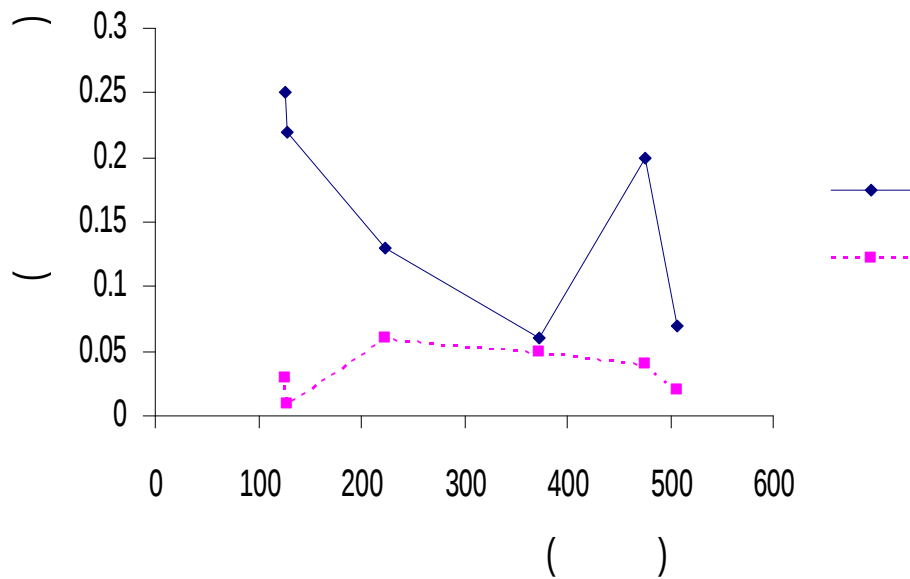
()

()

TS01	507	0.07	0.02
TS02	475	0.20	0.04
TS05	372	0.06	0.05
TS07	224	0.13	0.06
TS10	129	0.22	0.01
TS11	127	0.25	0.03
		0.25	0.06
		0.06	0.01
		0.16	0.04

4.6

(. . 2549)



30-90

(, 2544)

-

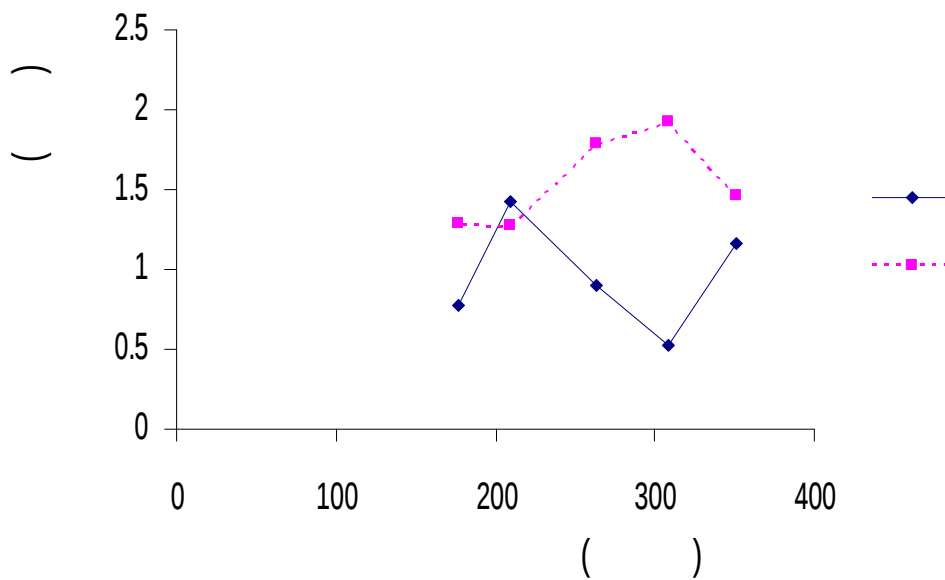
(,

2523; ,2527)

0.95
(CPY01)
(,2541)
0.52-1.42
(CPY04)
1.42 1.16
5.0

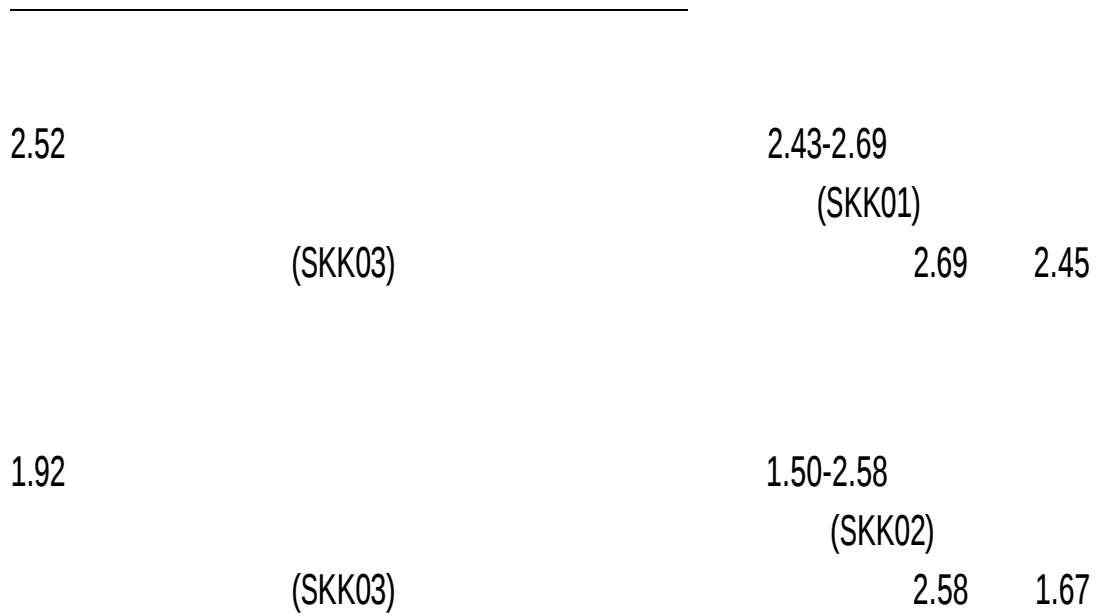
4.7

(. . 2549)



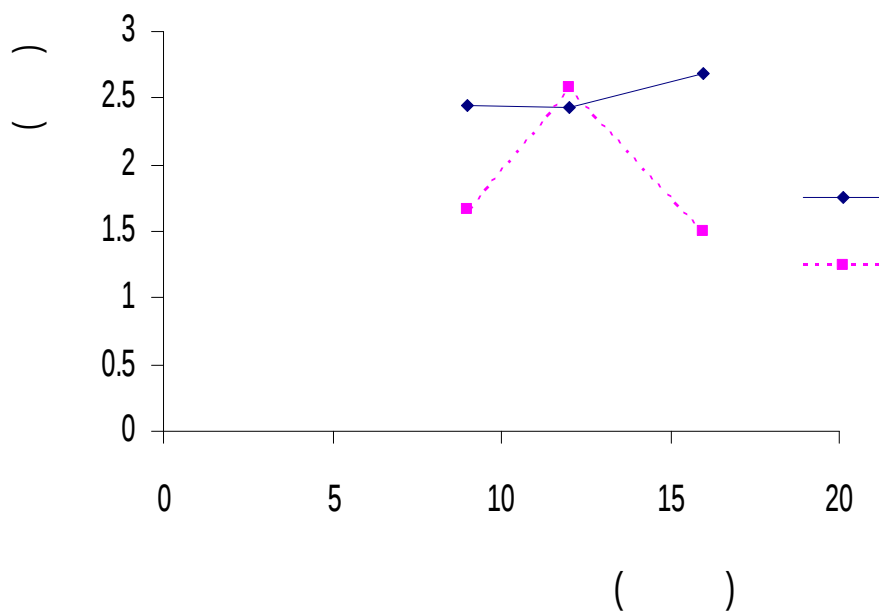
1.55
(CPY03)
1.28-1.92
(CPY02)
1.92 1.79

2 (4.7)
5.0 (,2541)



4.8

(. . 2549)



2 (4.8)

(, 2544)

1.81

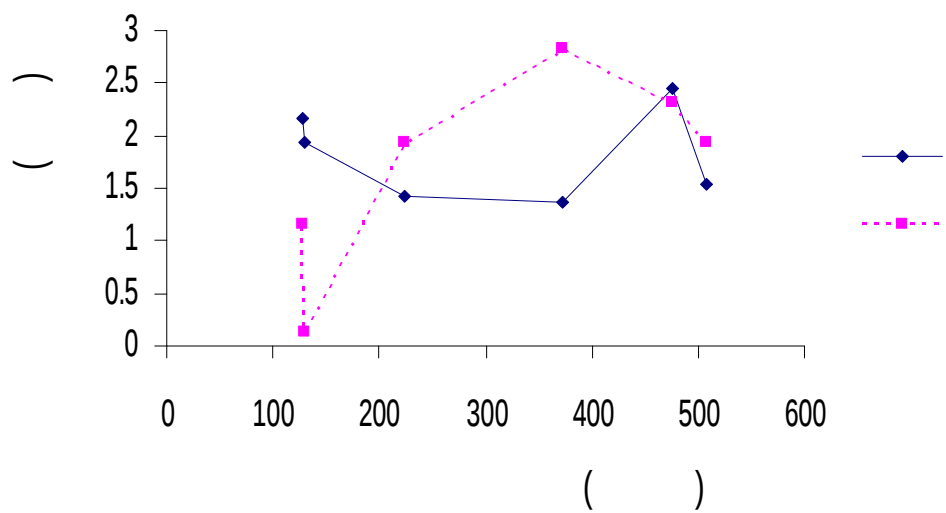
1.37-2.45
(TS02)

(TS11)

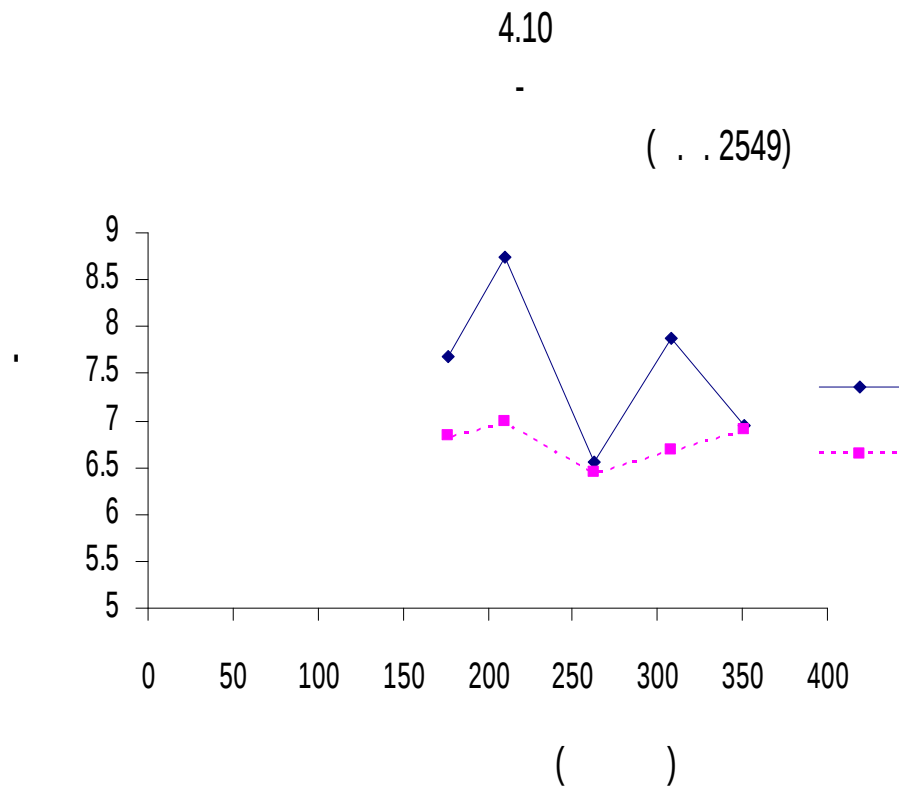
2.45 2.17

4.9

(. . 2549)



$$2 \quad (4.10)$$



6.20-7.18 (SKK01)

6.1-7.3 (SKK02)

6.54

7.18 6.25

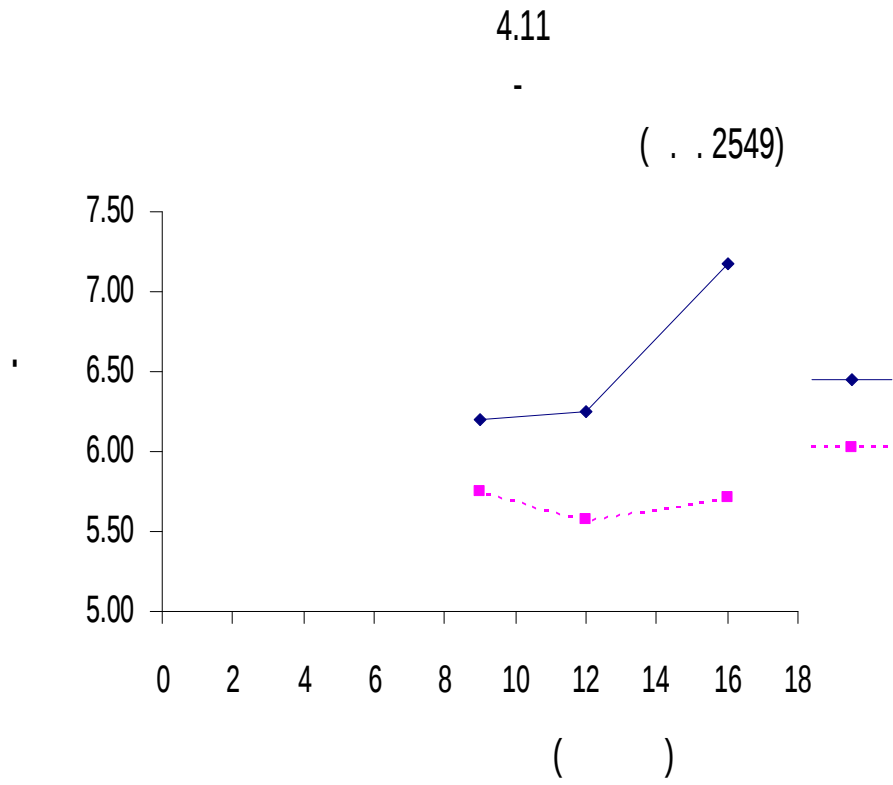
5.58-5.75 (SKK03)

5.68

5.6-6.0

5.75 5.71

2 (4.11)



-

6.89

6.25-7.86

(6.1-8.4 (,2542))

(TS10)

(TS11)

7.86 7.32

7.06

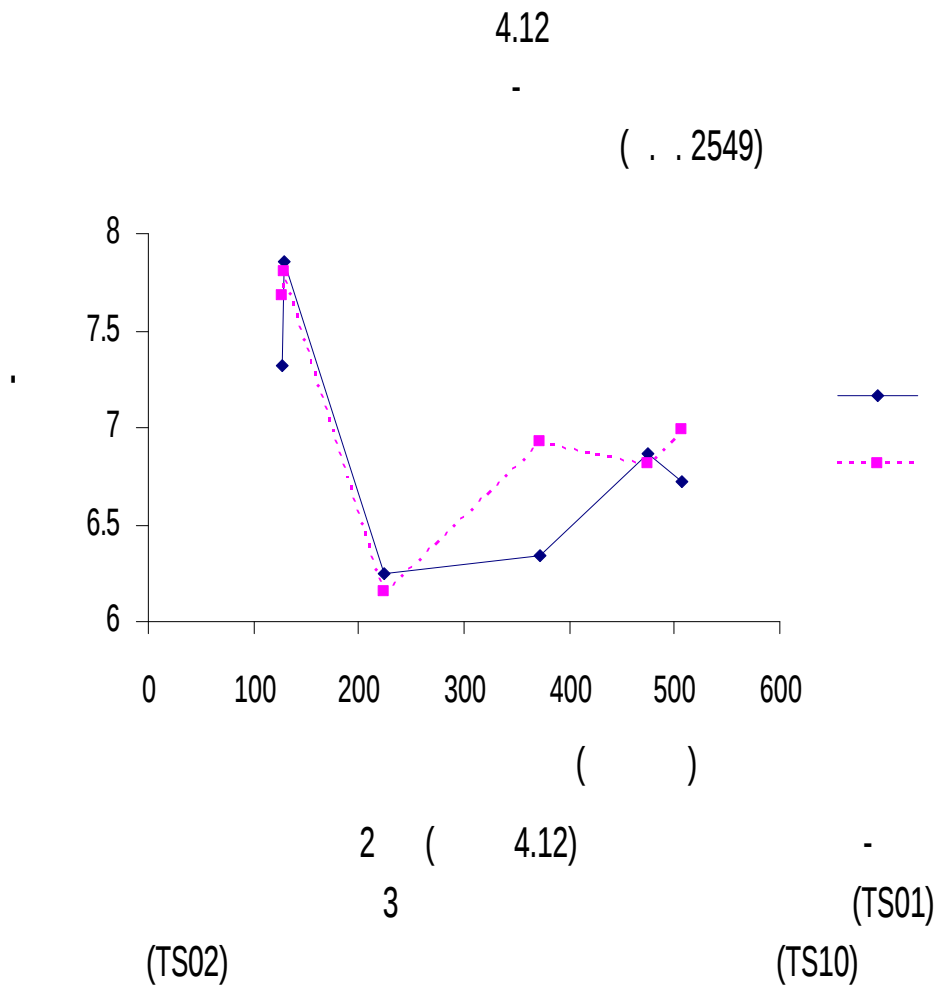
6.15-7.80 (,2542))

6.1-7.80 (,2542))

(TS11)

(TS10)

7.78 7.76



186.40

122.33–269.67

(CPY02)

(CPY01)

269.67 255.67

(Mclusky, 1974)

81

(, 2517)

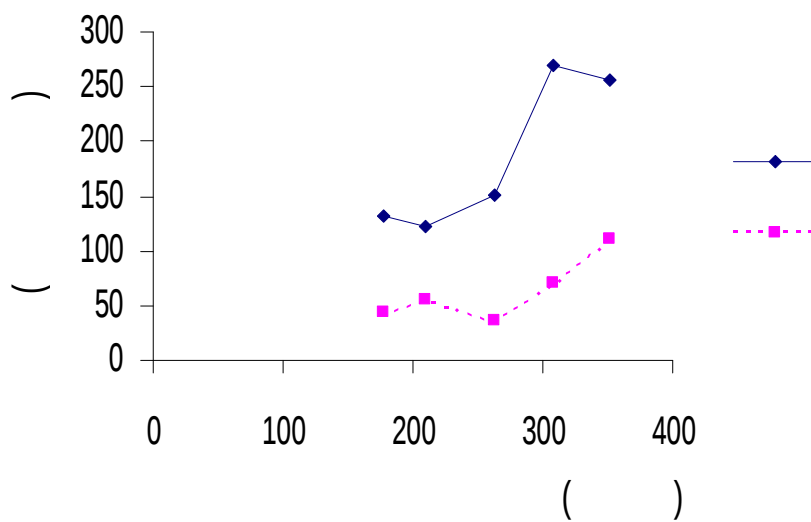
(CPY04)

(CPY05)

122.33 132.67

4.13

(. . 2549)



63.33

36.50-110.83

(CPY01)

(CPY02)

110.83 70.16
(CPY01)

82

(2547)

(CPY03)

36.50

(2540)

25

183.89

162.33–200.00

(SKK03)

(SKK01)

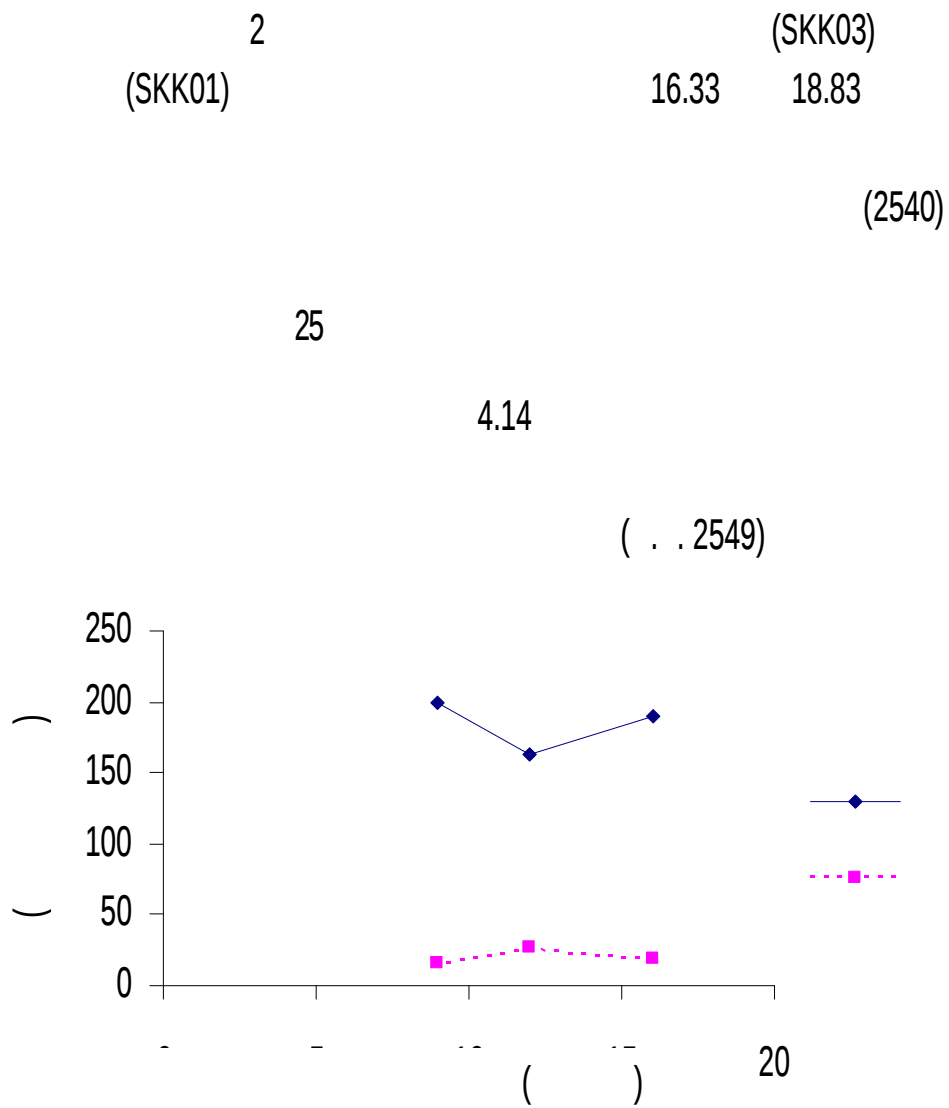
200.00

189.33

20.77

18.83–27.16

(SKK02)



770.53

195.33-3051.00 (TS01)

(TS05)

3051.00 496.00

(,2537)

84

(, 2548)

(, 2534)

(TS10)

(TS11)

195.33 236.33

(, 2544)

2409.11

150.00-8744.00

(TS02)

8744

(2547)

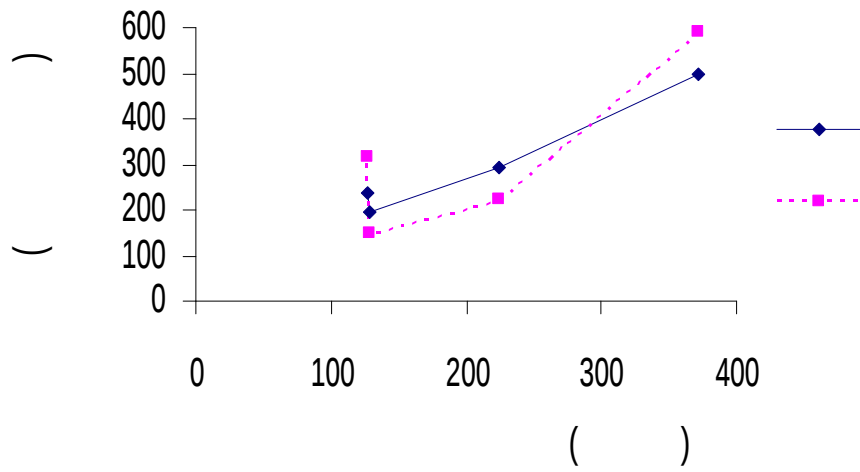
(TS10)

150.00

4.15

127-372

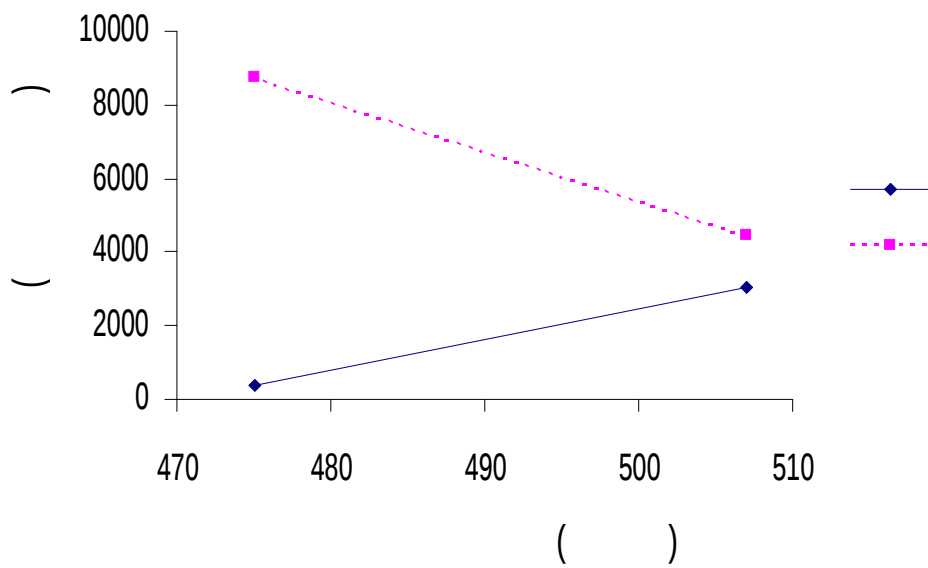
(. . 2549)



4.16

475-507

(. . 2549)





R = 0.900

95

Trzedzi and Kowalski (1975)

(Mclusky, 1974)

(

, 2540)

$$y = 15.299x - 0.195$$

(r^2) 0.810 y
() x
)

(

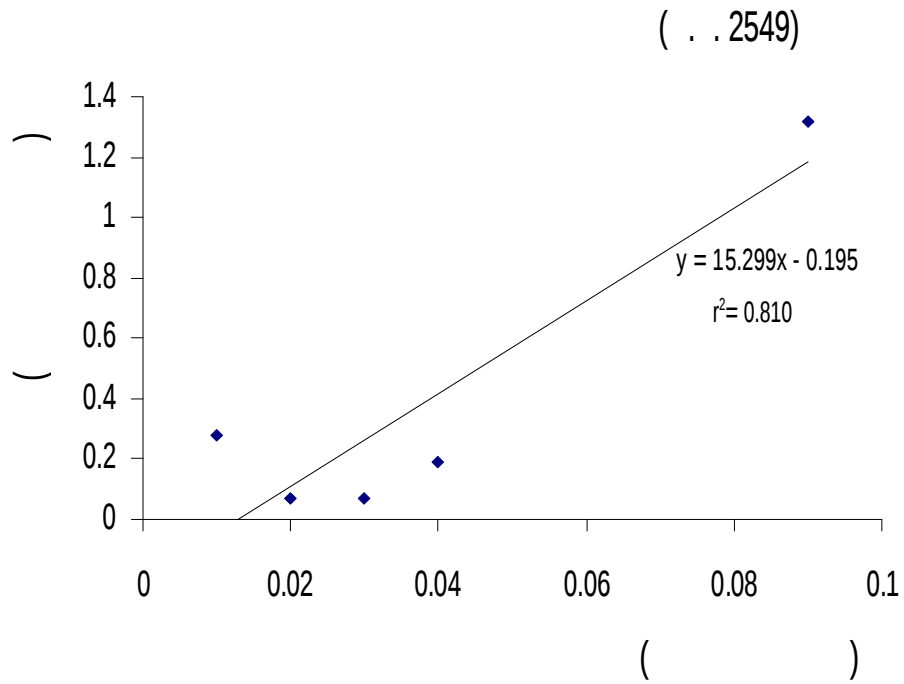
1

15.299

4.17

R = 0.903

4.17



95

60 (, 2545)

33

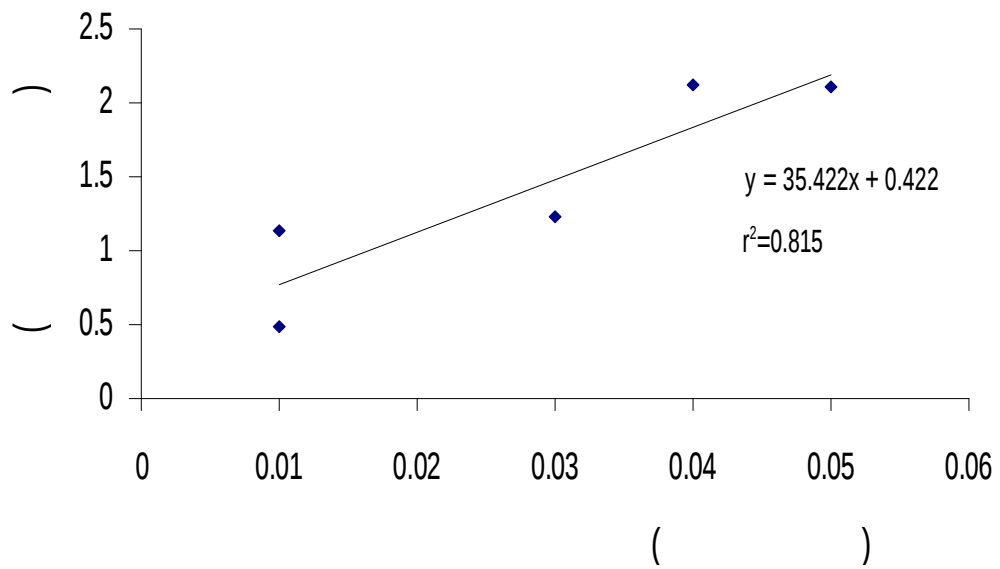
(Meister, 1999; Hornsby, Wauchope and Herner, 1995)

$$y = 35.422x + 0.422$$

(r^2) 0.815 y
 () x
 4.18

4.18

(. . 2549)



R = -0.874

95

33

(Meister, 1999; Hornsby, Wauchope and Herner, 1995)

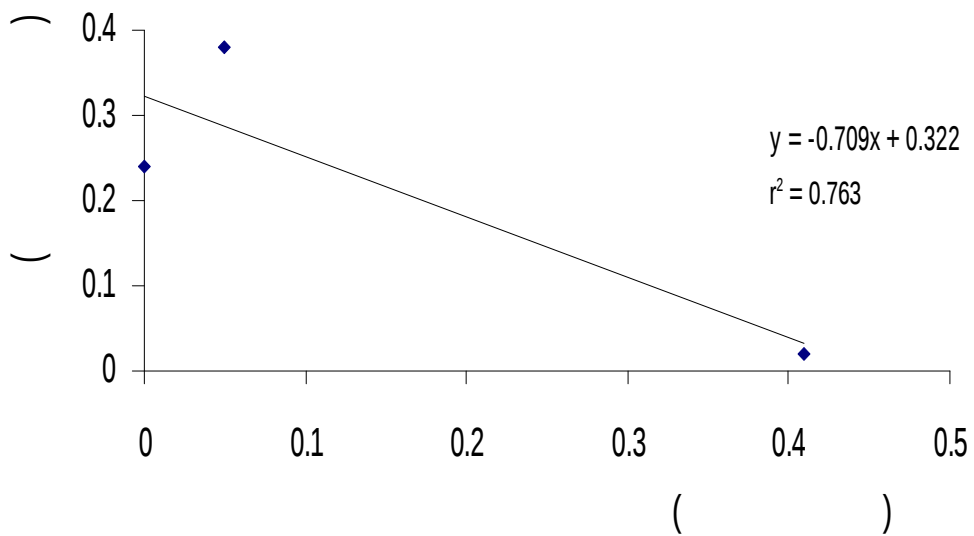
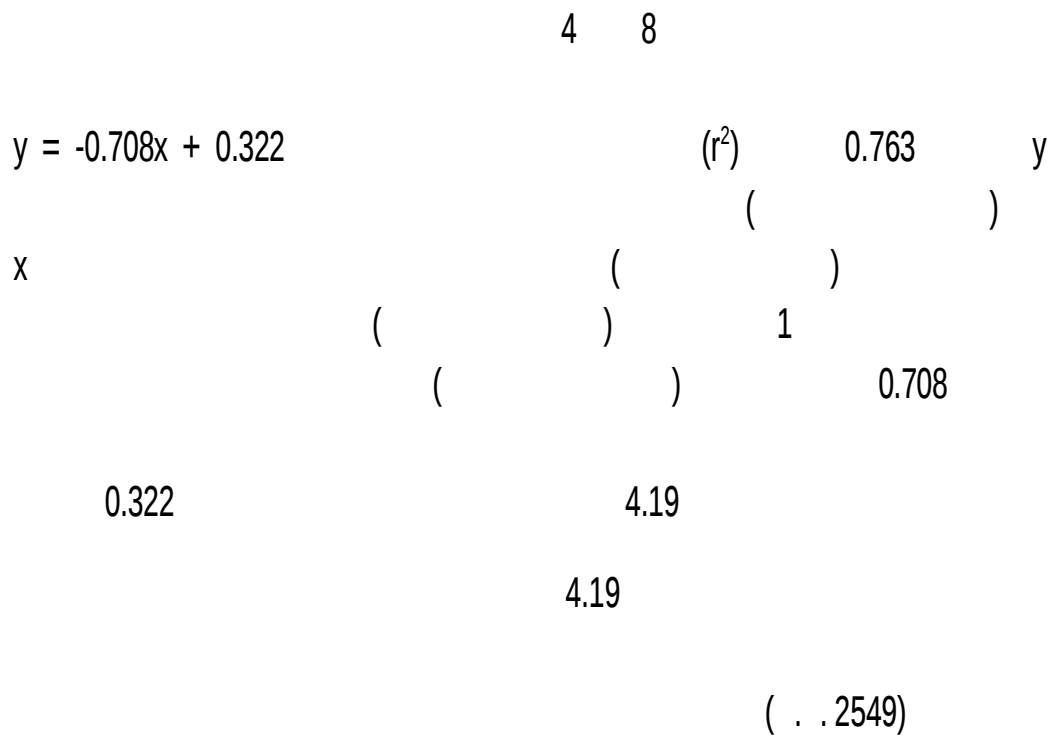
(,

2540)

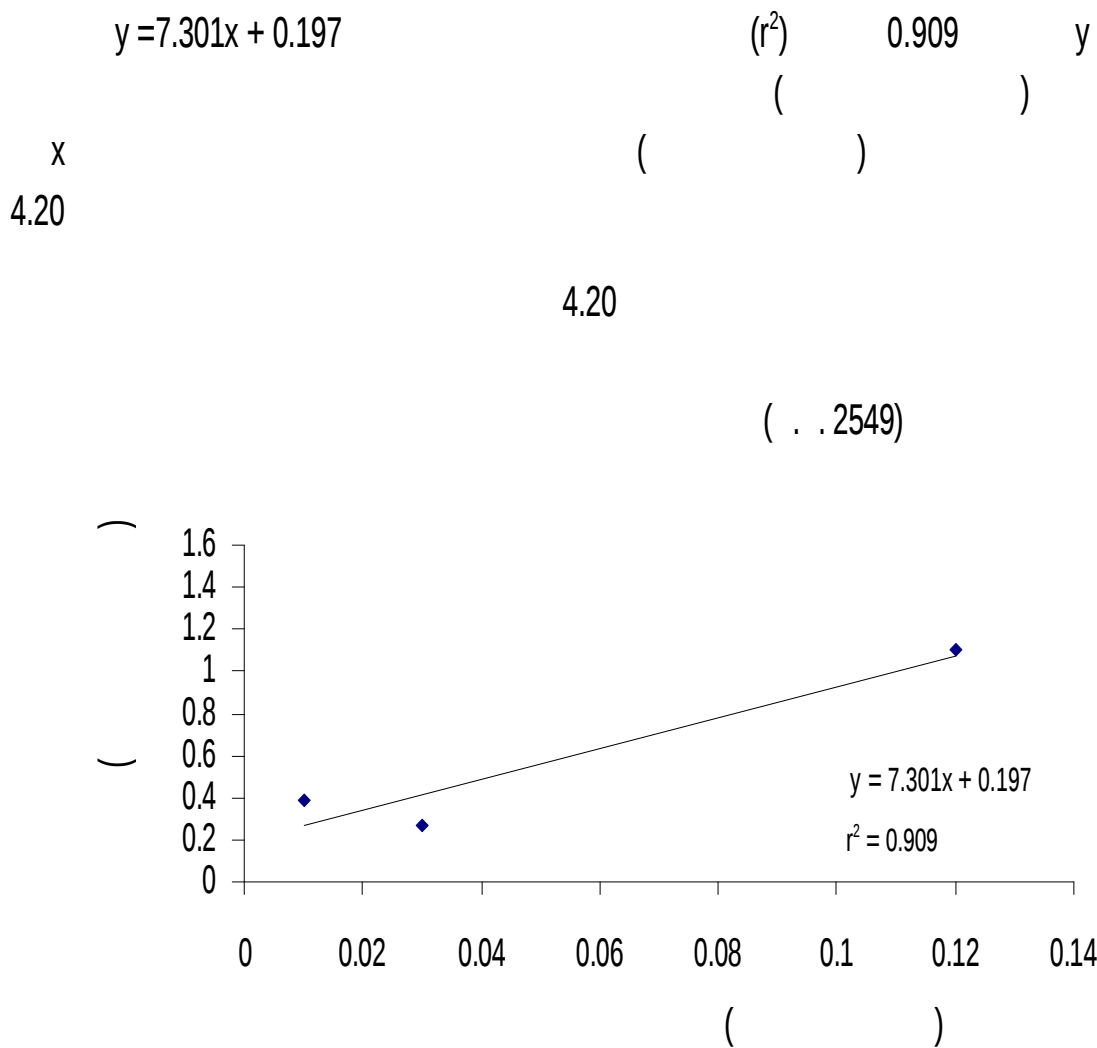
-

(2529) Liu (1970)

Triazine



R = 0.954

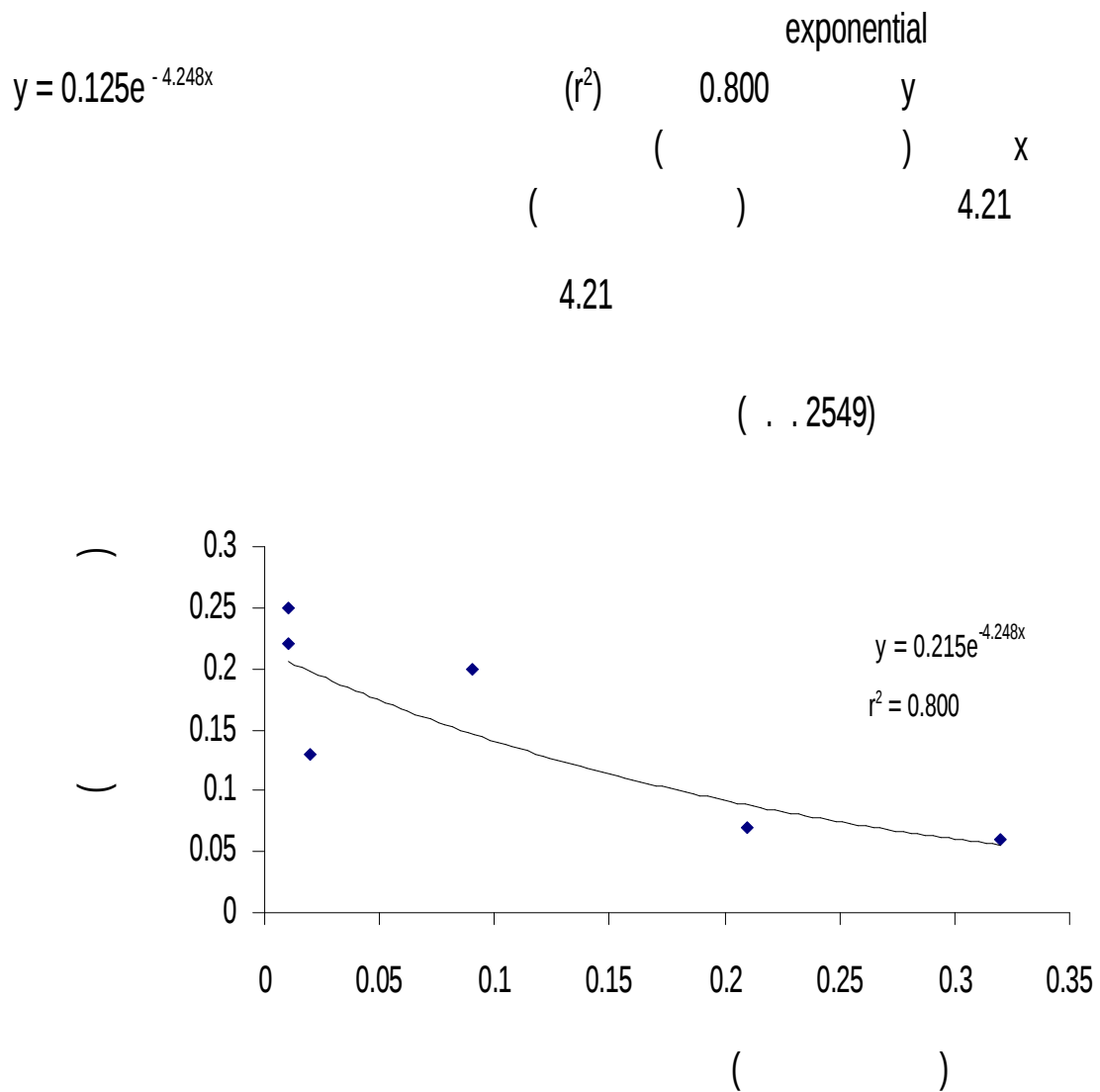


R = -0.836

95

33

(Hornsby, Wauchope and Herner, 1995)



$$R = 0.908$$

95

(

, 2542)

$$y = 0.034x +$$

0.020

(r^2)

0.825

y

(

)

x

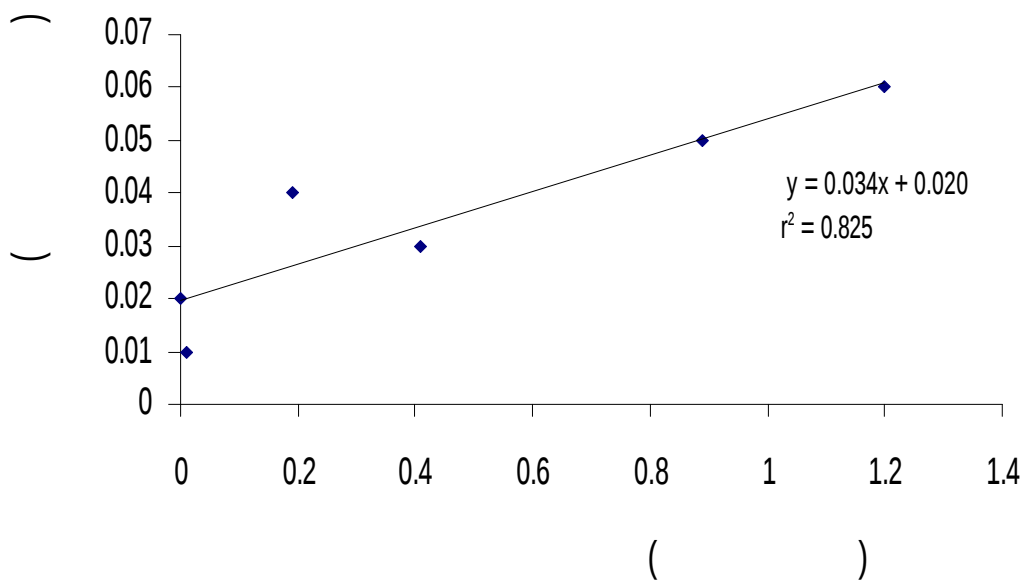
(

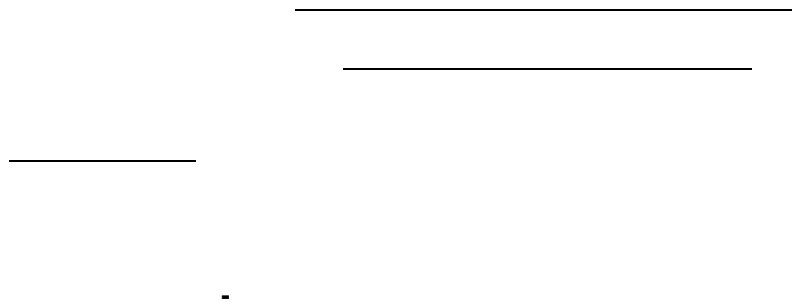
)

4.22

4.22

(. . 2549)

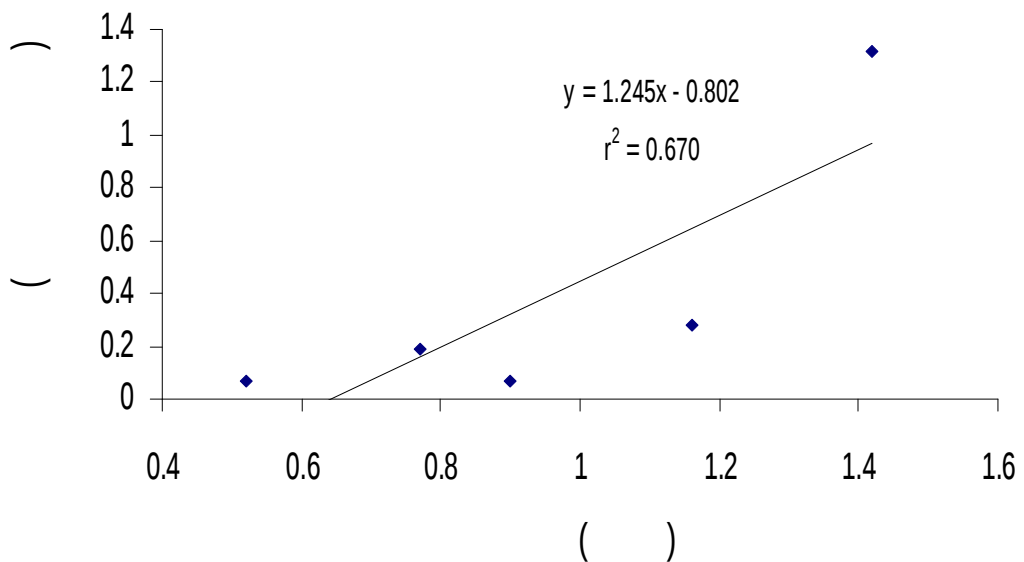




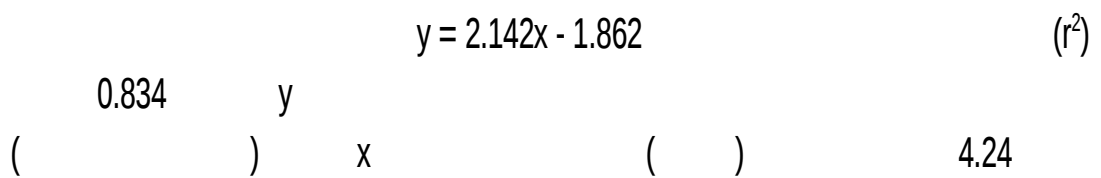
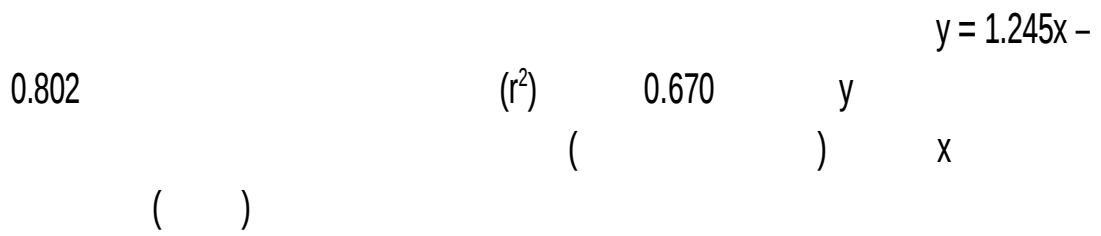
R = 0.819

Fletcher (1965) 95 (4.23) Talbert and
4.23

(. . 2549)

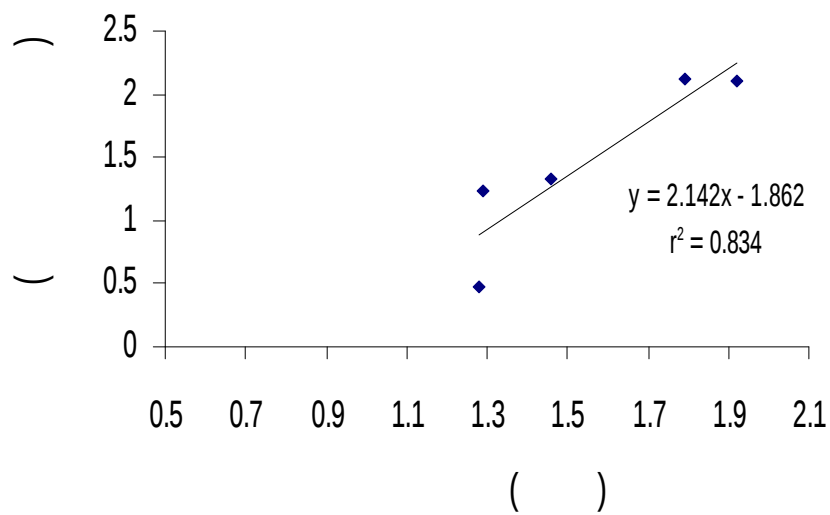


Konda et al. (2002)



4.24

(. . 2549)



-

R = 0.835

95 (4.25)

$$y = 1.048x - 2.431$$

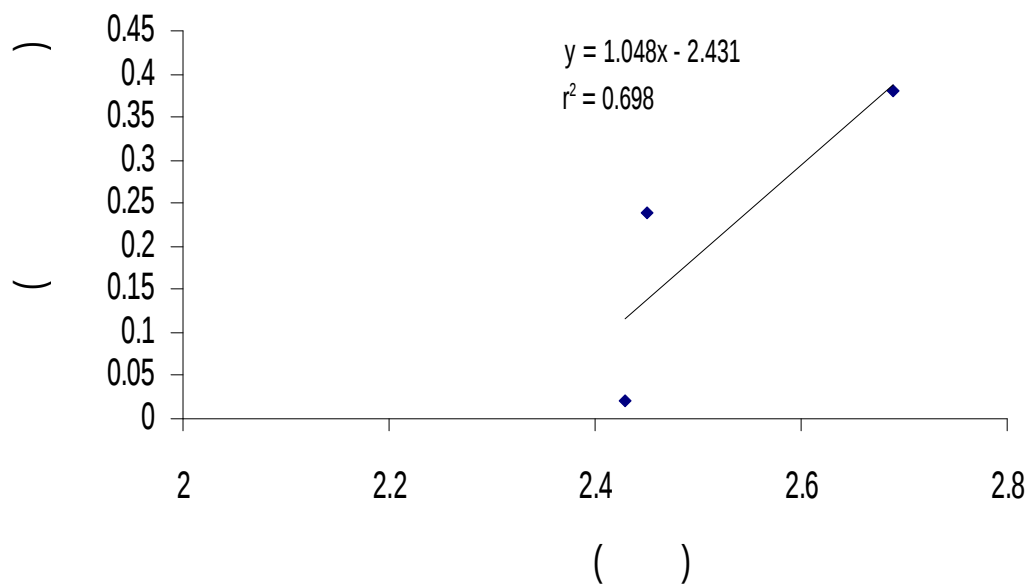
(r^2) 0.698 y
() x

() Talbert and Fletchall (1965)

()
 5.0 (,2541)) 2.52

4.25

(. .2549)



R = 0.961

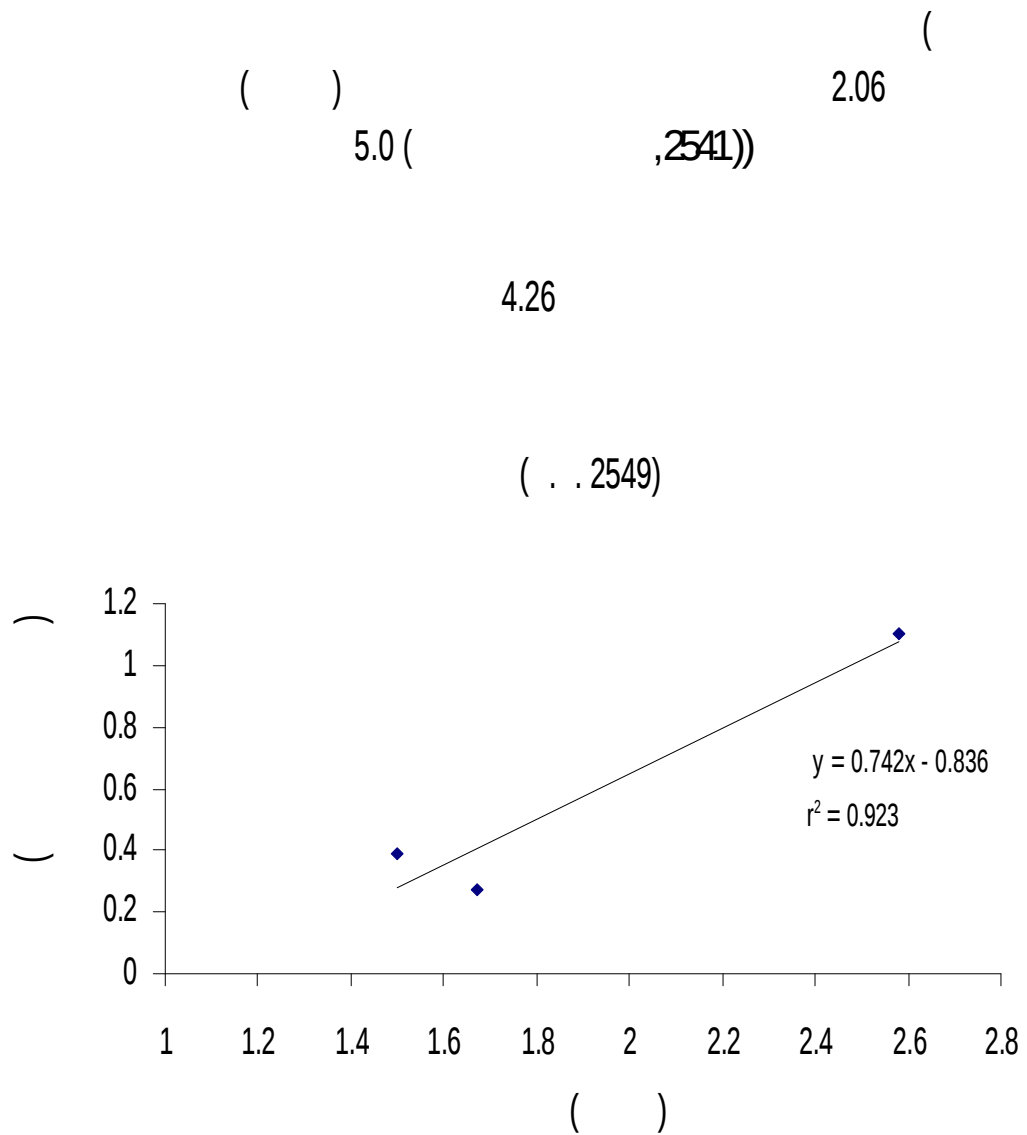
95 (4.26)

$$y = 0.742x - 0.836$$

(r^2) 0.923 y
 () x

() Talbert and Fletchall (1965)

97



R = 0.822

95 (

4.27)

(2547)

White (1971)

Triazine

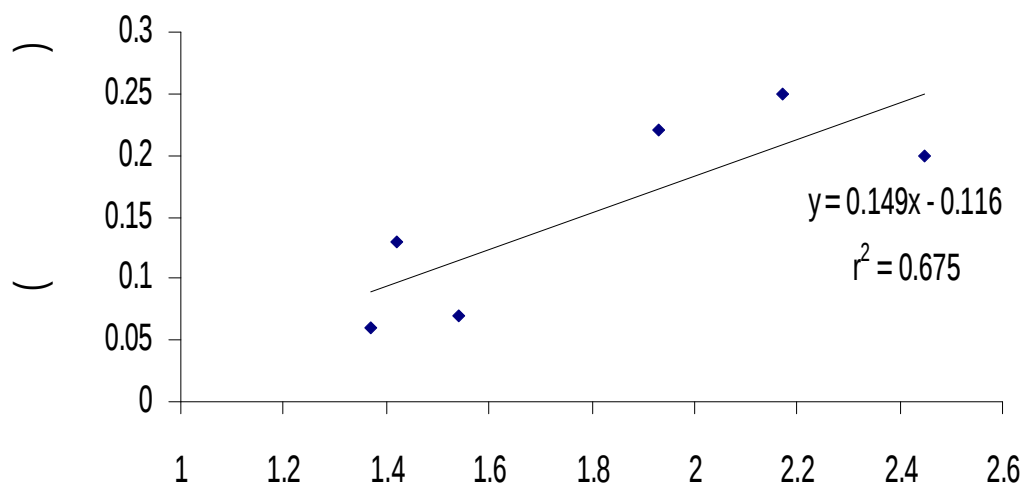
$$y = 0.149x - 0.116$$

(r^2) 0.675

()

4.27

(. . 2549)

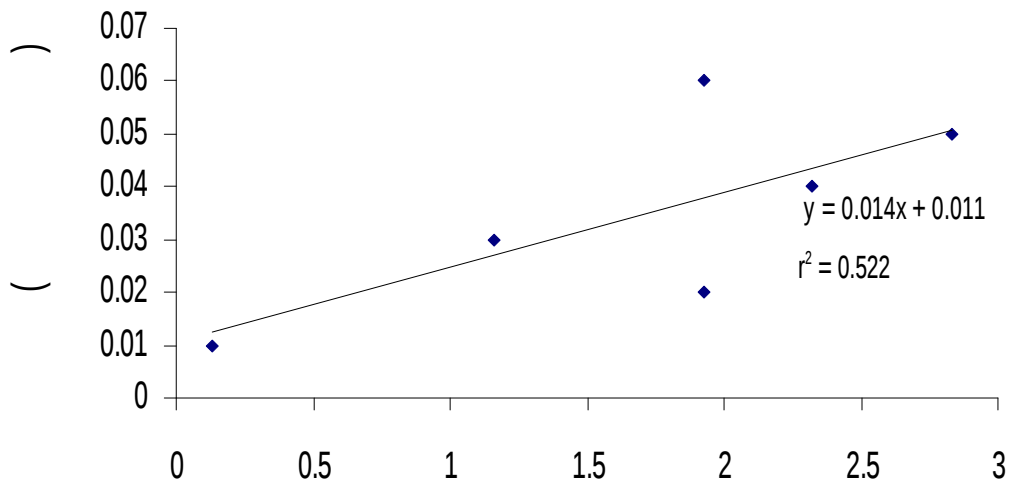


$$R = 0.723$$

95 Talbert and Fletchall (1965)

4.28

(. . 2549)



$$y = 0.014x + 0.011$$

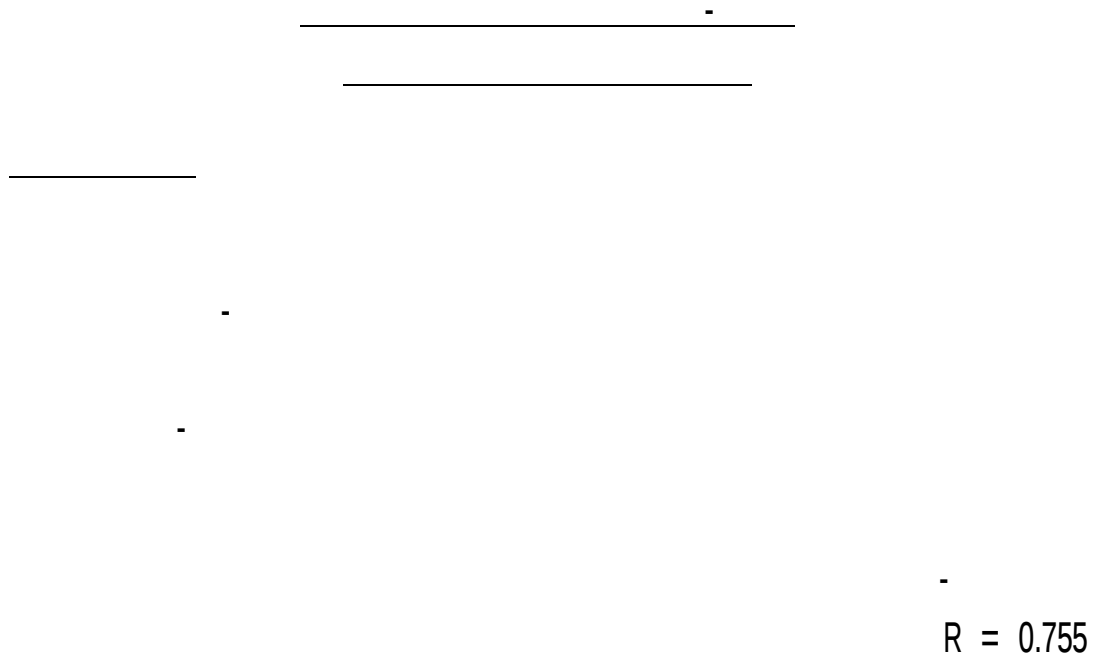
$$(r^2) \quad 0.522 \quad y$$

()

x

()

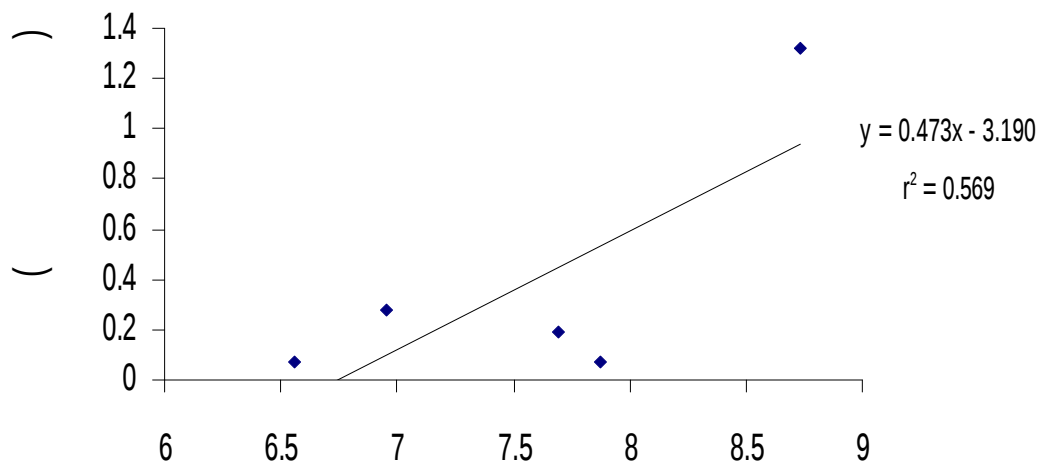
4.28



Talbert and Fletchall (1965)

4.29

(. . 2549)



Turner (1967)

Triazine

CEC

(CEC)

CEC

Harris (1966)

CEC

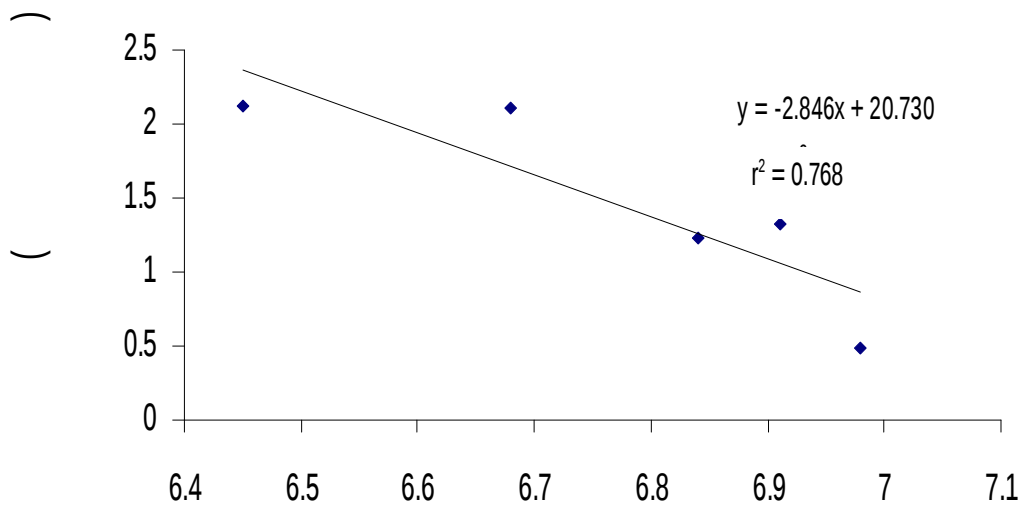
$y = 0.473x - 3.190$

(r^2) 0.569

() x

4.30

(. . 2549)



R = -0.877

(4.30)

-

(Talbert and Fletchall, 1965)

-

-

$$y = -2.846 x + 20.730$$

(r^2)

0.768

y

(

)

x

-

-

-

R = 0.767

-

95 (4.31)

Talbert and Fletchall (1965)

-

Turner (1967)

-

(CEC)

Harris (1966)

Triazine

CEC

CEC

-

CEC

-

$$y = 0.252x - 1.437$$

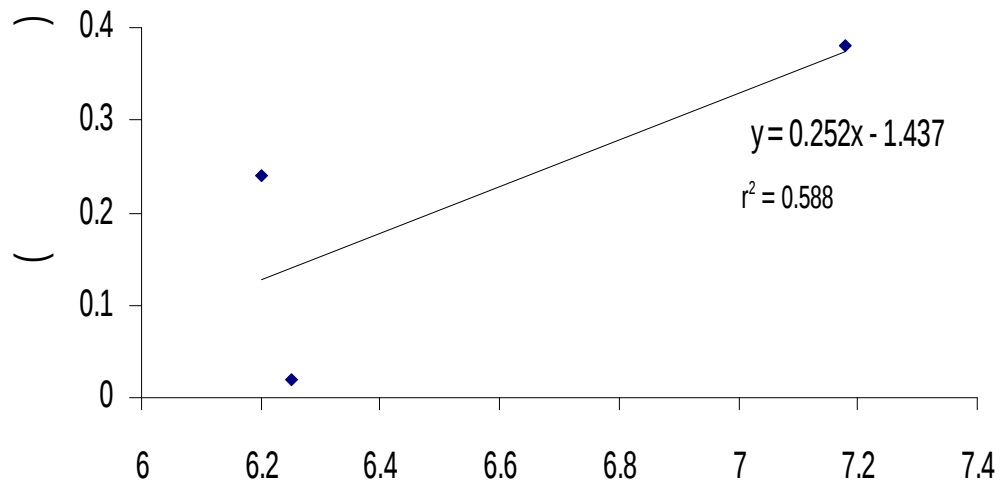
(r²) 0.588 y
()

x

4.31

-

(. . 2549)



R = -0.996

95 (4.32)

(2529) Liu (1970)

Triazine

Oliveira et al. (2001)

Talbert and Fletchall (1965)

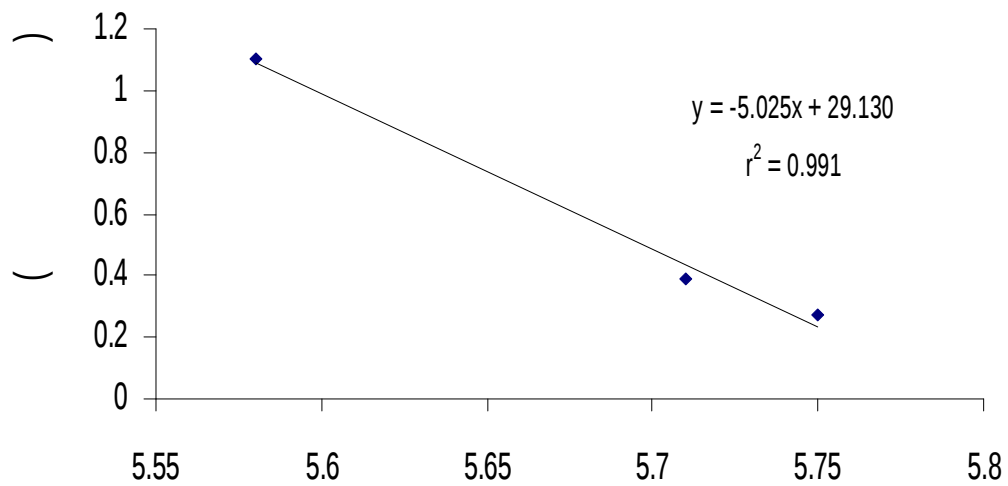
$$y = -5.025 x + 29.130$$

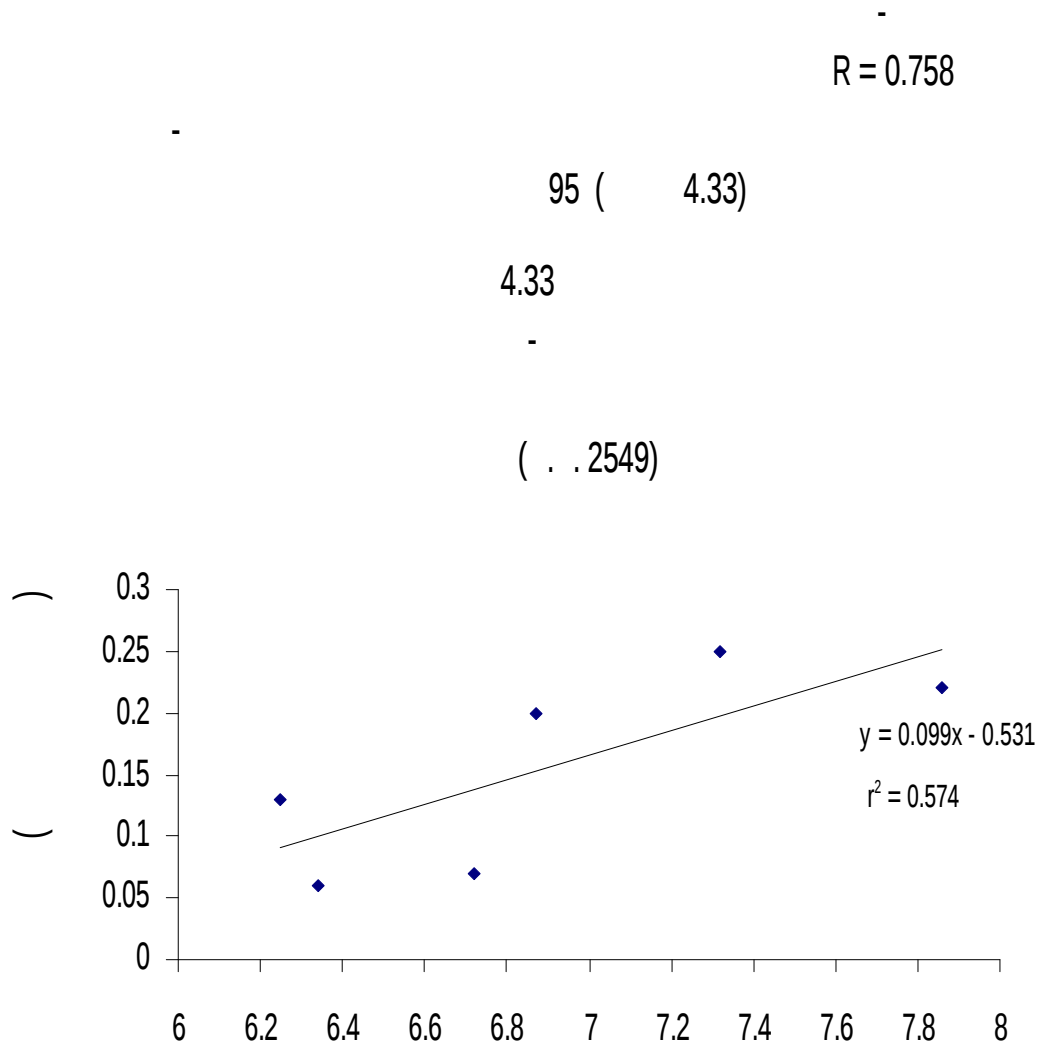
(r^2) 0.991

() x

4.32

(. . 2549)





Talbert and Fletchall (1965)

Turner (1967)

(CEC)

Harris (1966)

Triazine

CEC

CEC

CEC

$$y = 0.099x - 0.531$$

$$(r^2) \quad 0.574 \quad y$$

$$(\quad) \quad x$$

$$R = -0.818$$

95

Weber (1969)

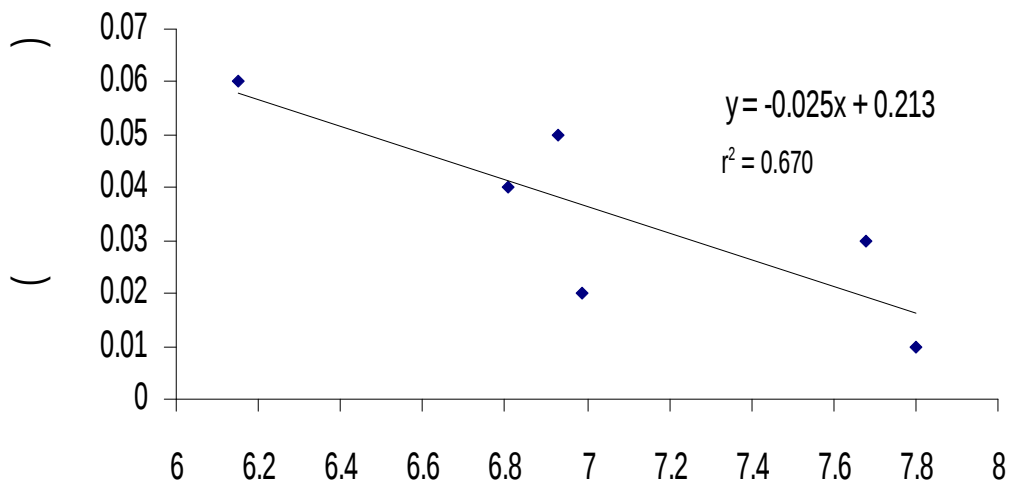
Triazine

(2529) Liu (1970)

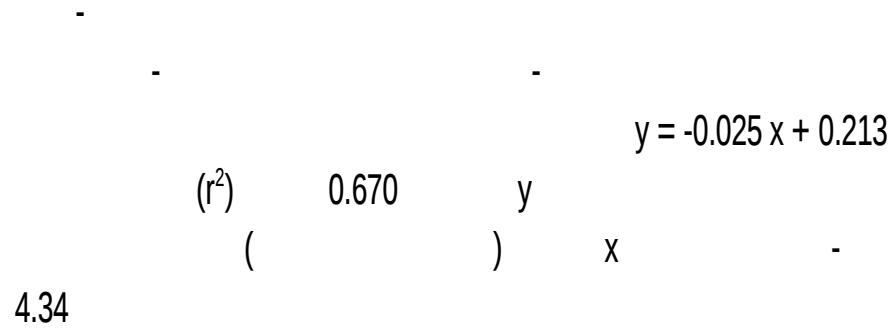
Triazine

4.34

(. . 2549)



- Oliveira et al. (2001)



paired t-test

95

(2530)

paired t-test

95

paired t-test

95

-
188.58 (,254)

paired t-test

95

33 (Meister, 1999)

paired t-test

33 95
(Meister, 1999)

paired t-test

95
33 (Hornsby, Wauchope and Herner, 1995)
(, 2528)

paired t-test

95

33 (Hornsby, Wauchope and Herner, 1995)

(, 2528))
60 (, 2545)

paired t-test

95

33 (Hornsby, Wauchope and Herner, 1995)

(, 2528)
60 (, 2545)

paired t-test

95

188.58 (, 2544)

paired t-test

95

60

(, 2545)

paired t-test

33

(Meister, 1999; Hornsby,

Wauchope and Herner, 1995)

(,

2540)

paired t-test

33

(Meister, 1999; Hornsby,

Wauchope and Herner, 1995)

(,

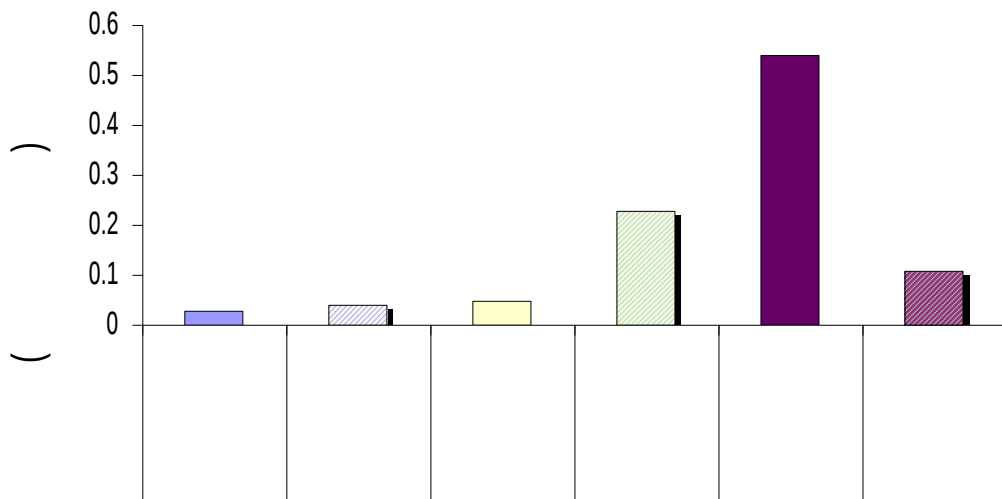
2540)



(4.35)

4.35

(. . 2549)



113

0.04 0.23

0.11

0.23

0.03 0.05

0.54

0.54

-

(4.36)

0.39 0.21

0.16

0.39

1.45

0.59 0.04

1.45

4.36

(. . 2549)

