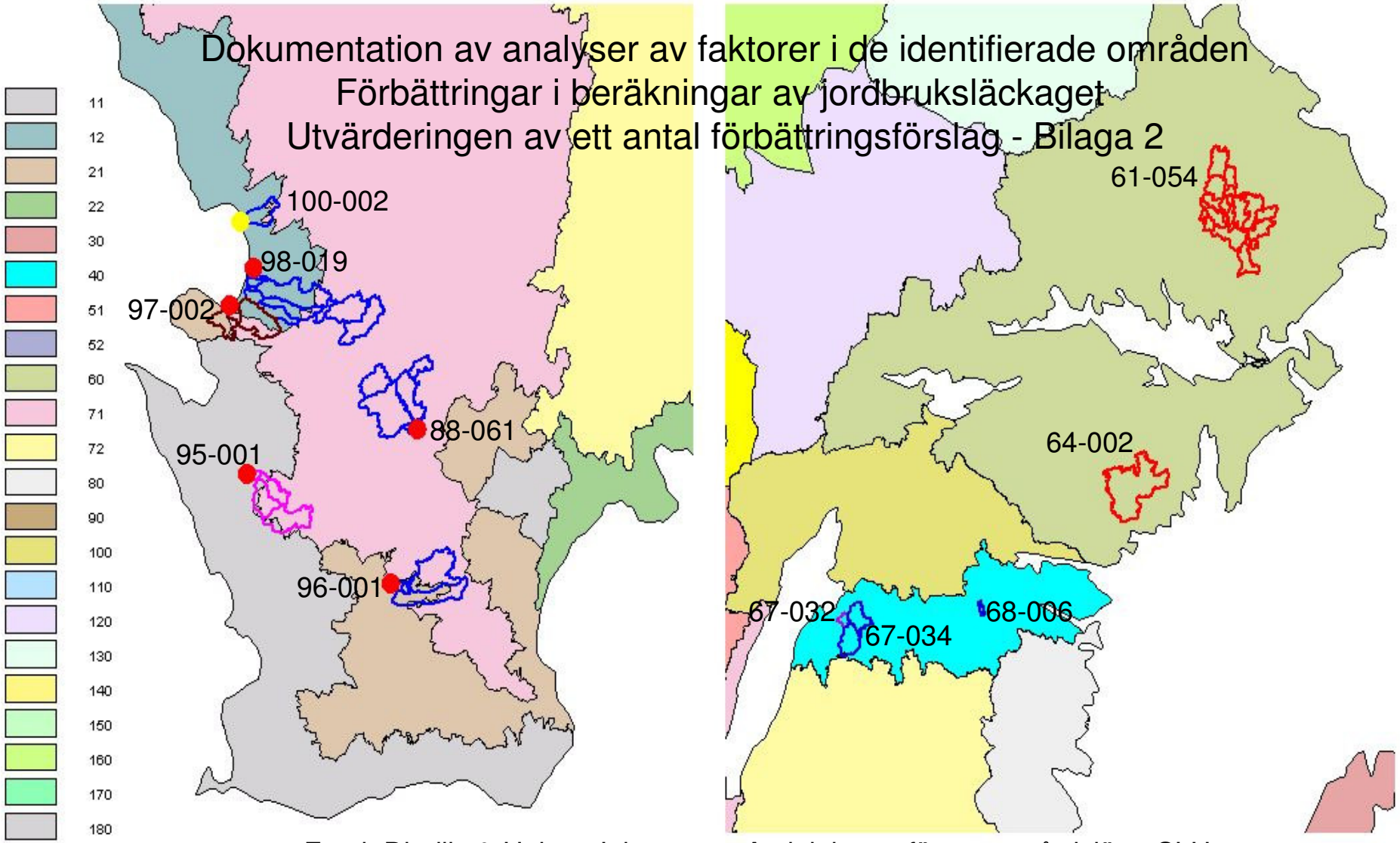
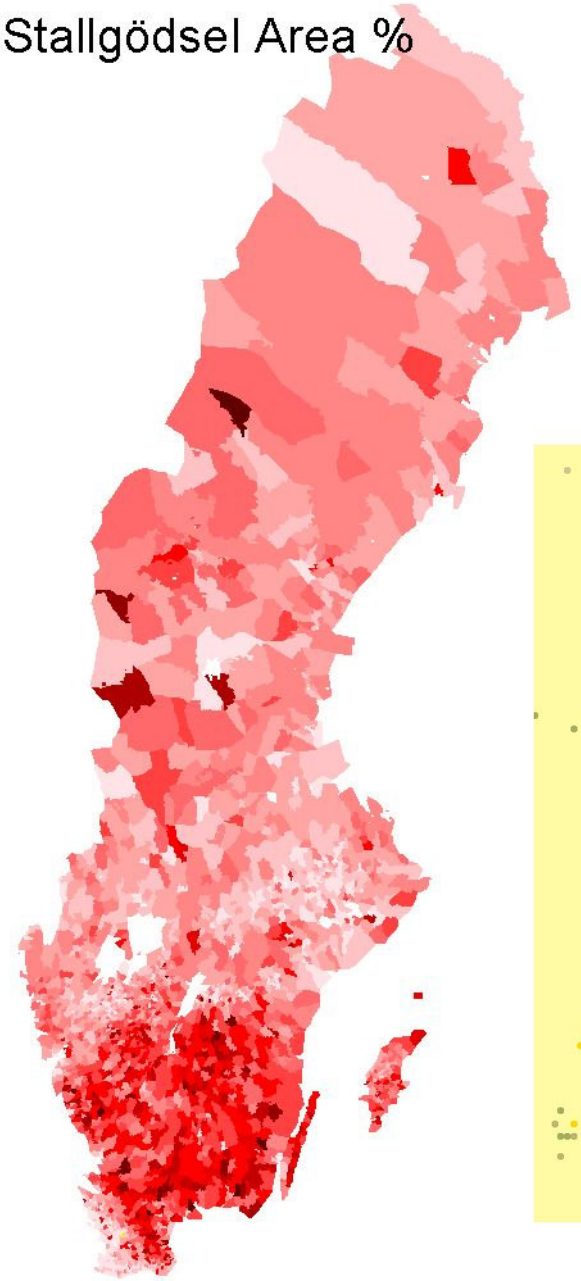
Dokumentation av analyser av faktorer i de identifierade områden
Förbättringar i beräkningar av jordbruksläckaget
Utvärderingen av ett antal förbättringsförslag - Bilaga 2



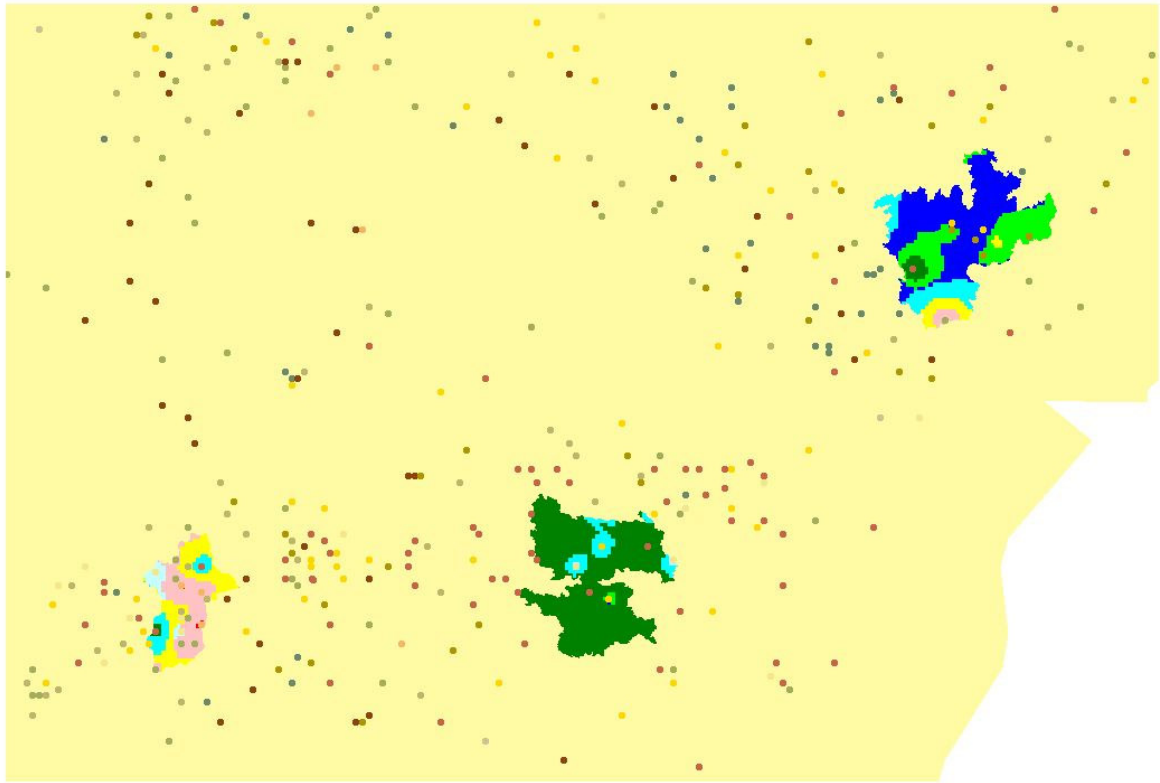
Faruk Djodjic & Holger Johansson, Avdelningen för vattenvårdslära, SLU

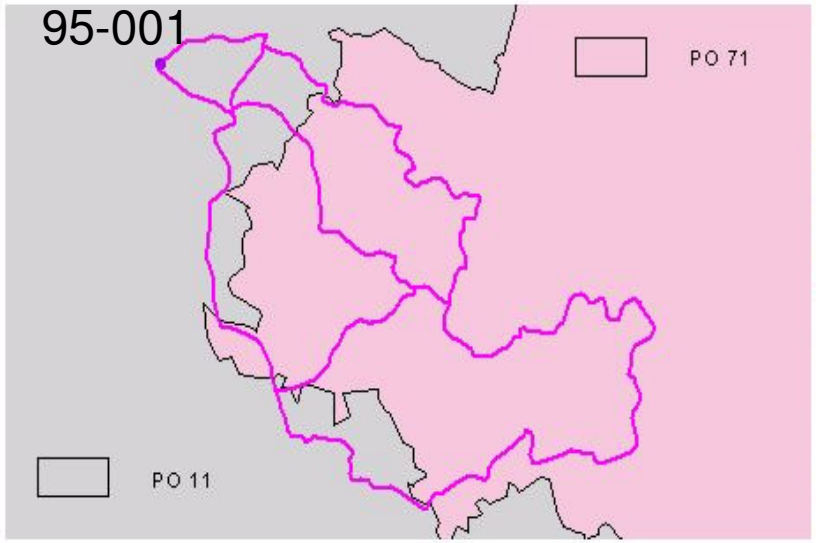
- Stallgödsel
- PO tillhörighet – representativitet
- Jordartsfördelning - interpolation
- Grödfördelning - representativitet
- q vs c

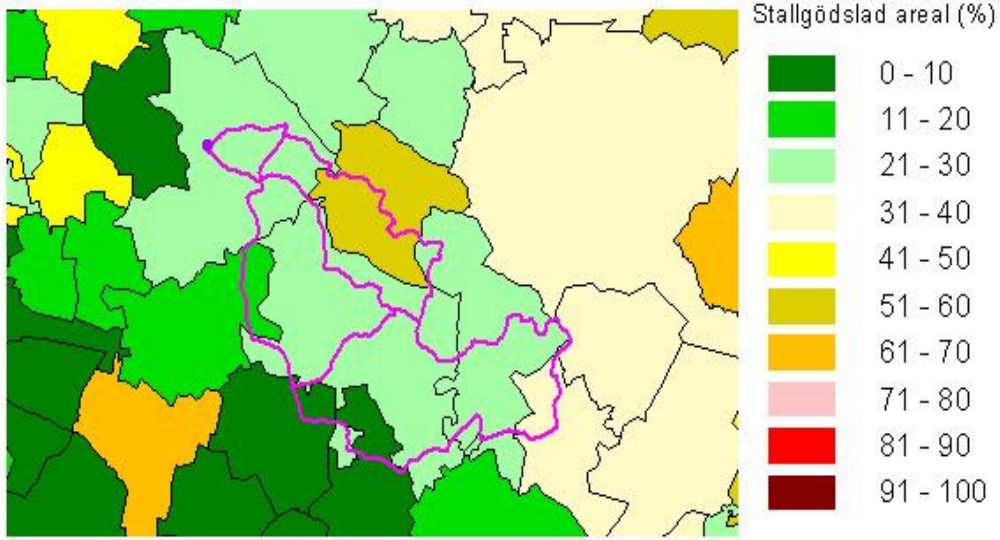
Stallgödsel Area %



Interpolation - jordart bestämning



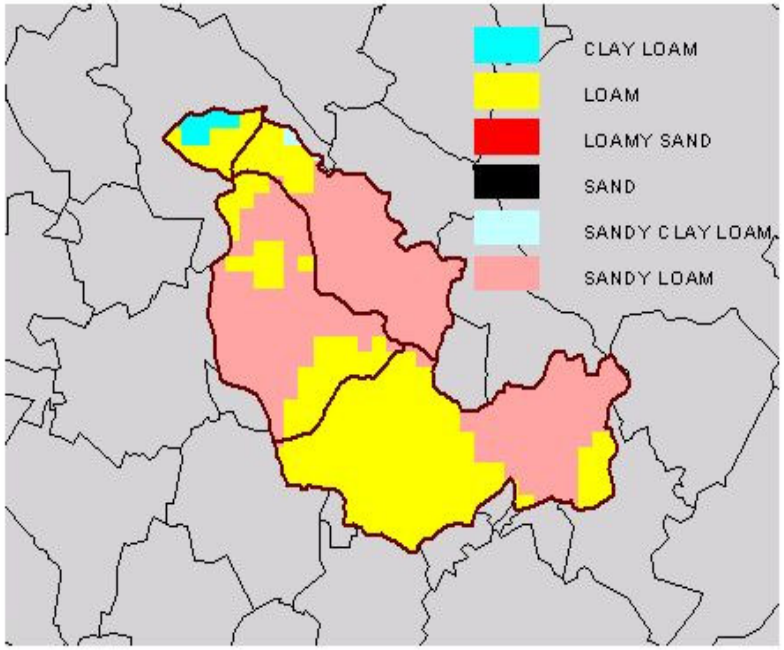


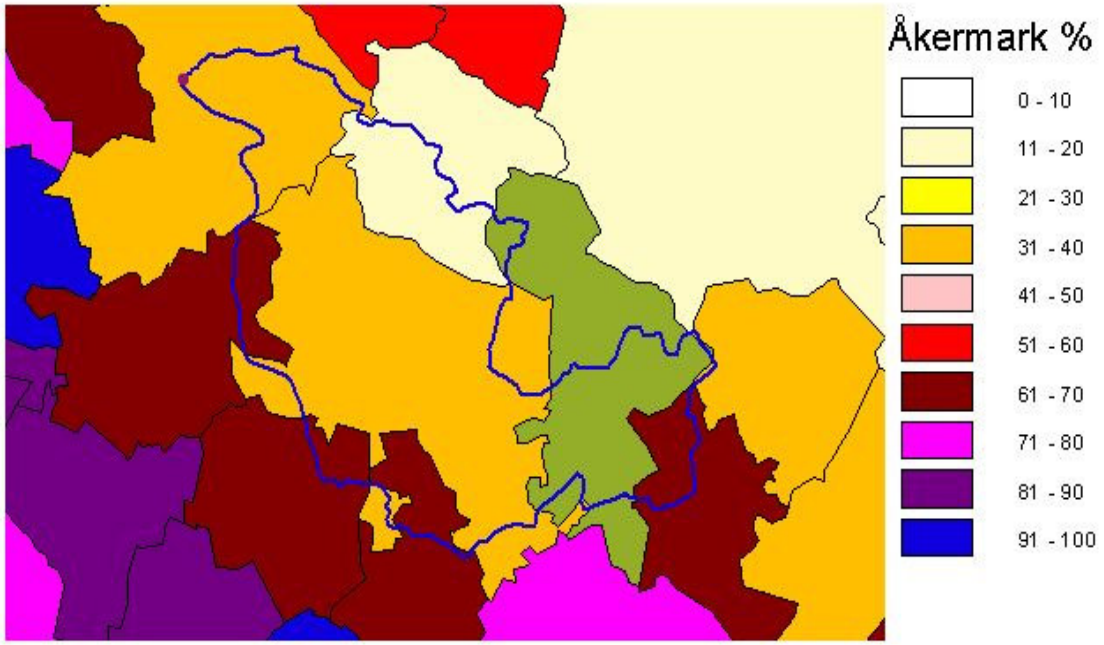


PO 71 73% Stallgödslad area
PO 11 27% Stallgödslad area

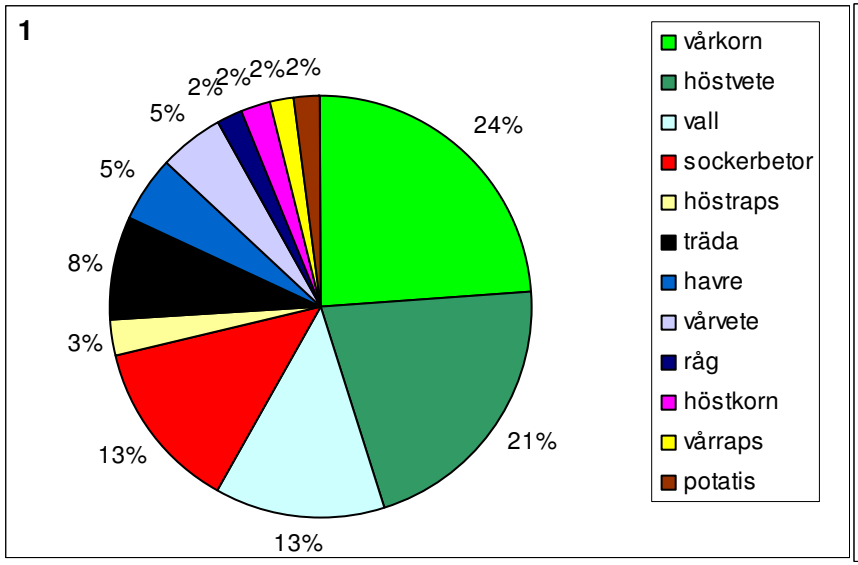
71 8% jordbruksmark

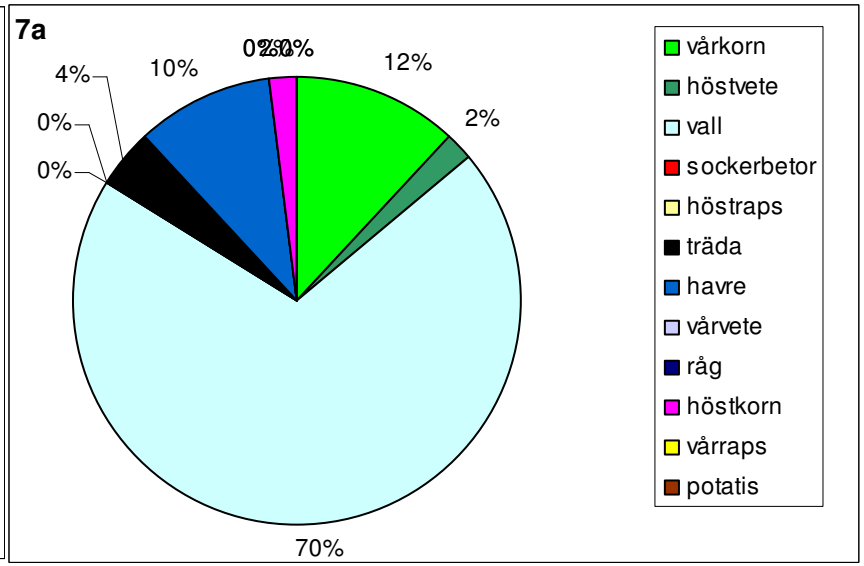
11 58% jordbruksmark

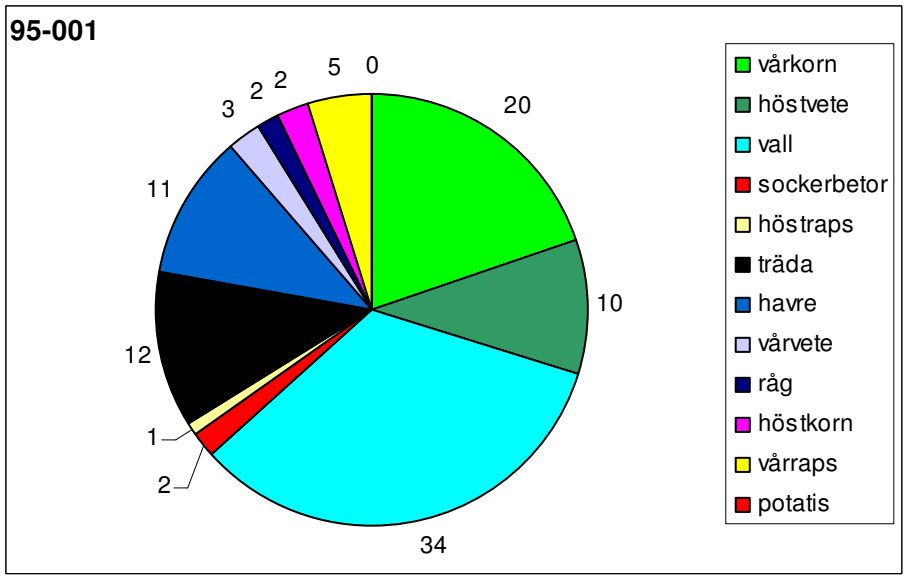


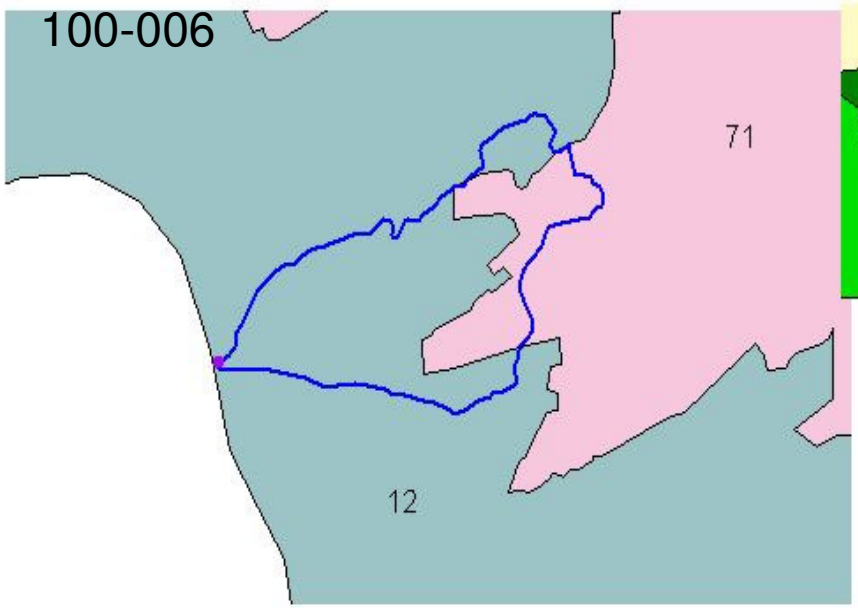


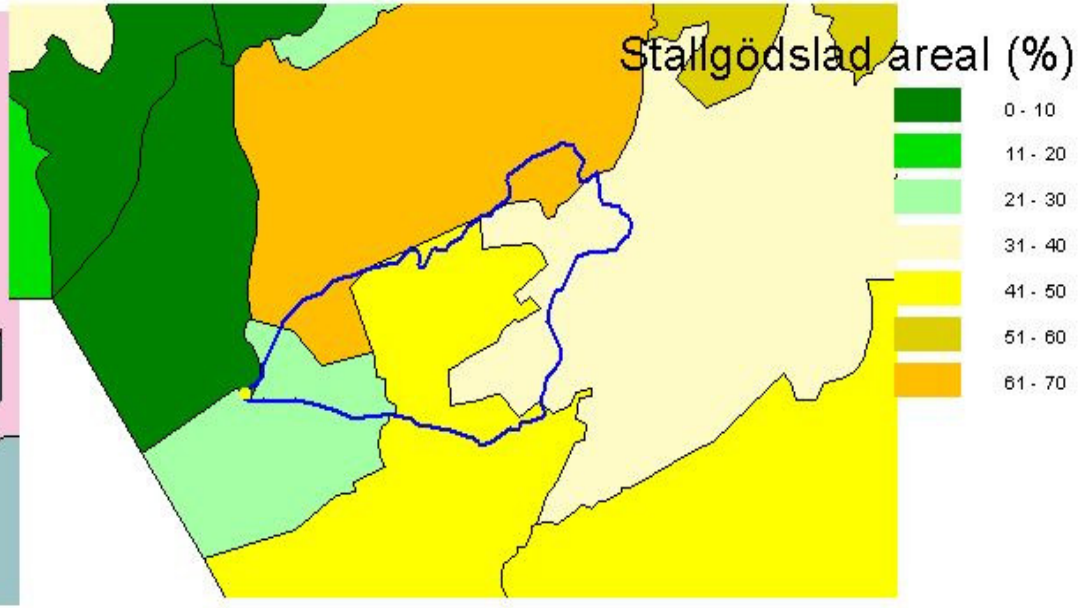
95-001

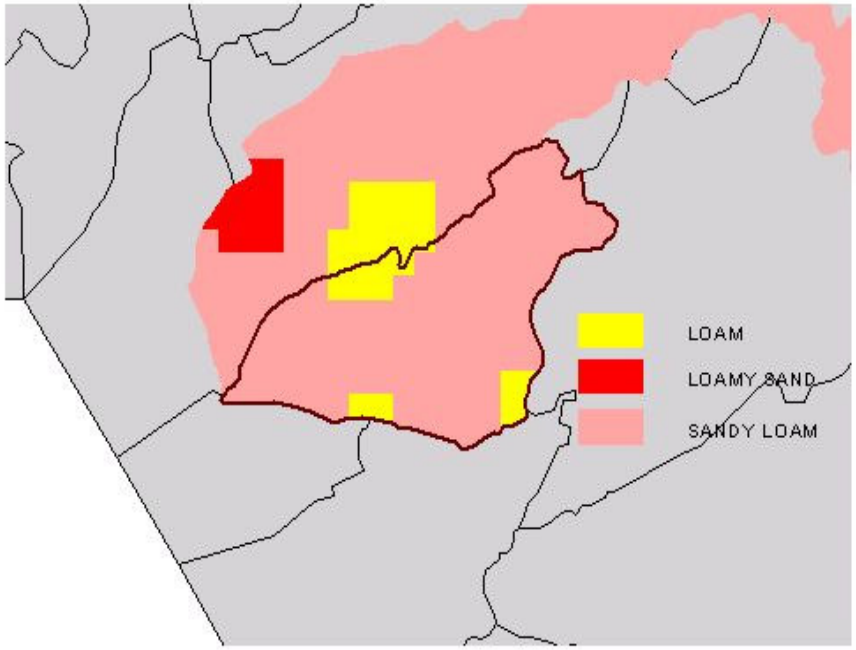

1
24%
21%
13%
13%
3%
8%
5%
5%
2%
2%
2%
2%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

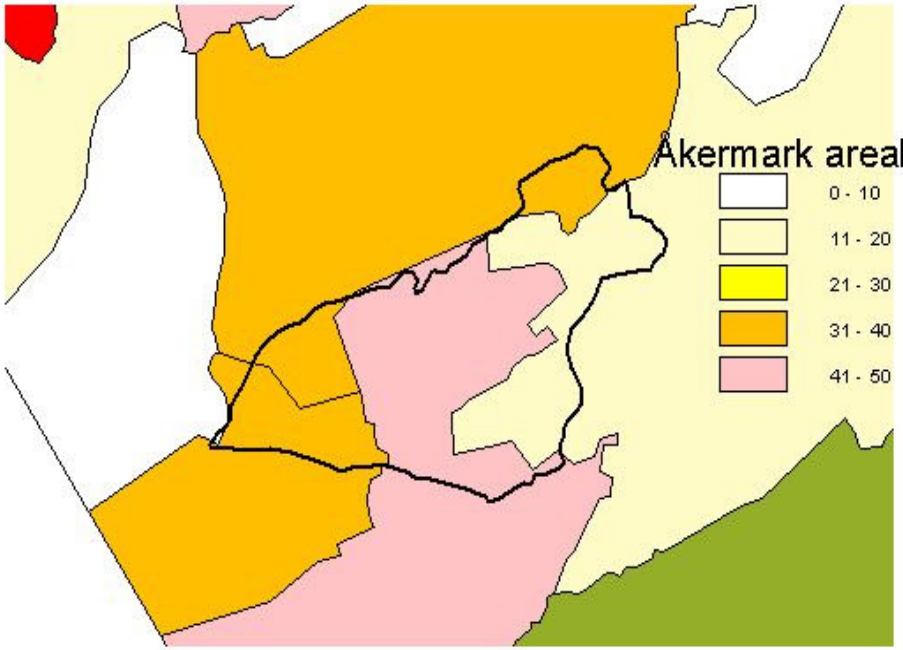

7a
12%
2%
70%
0%
0%
4%
10%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


95-001
20
10
34
2
1
12
11
3
2
2
5
0
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

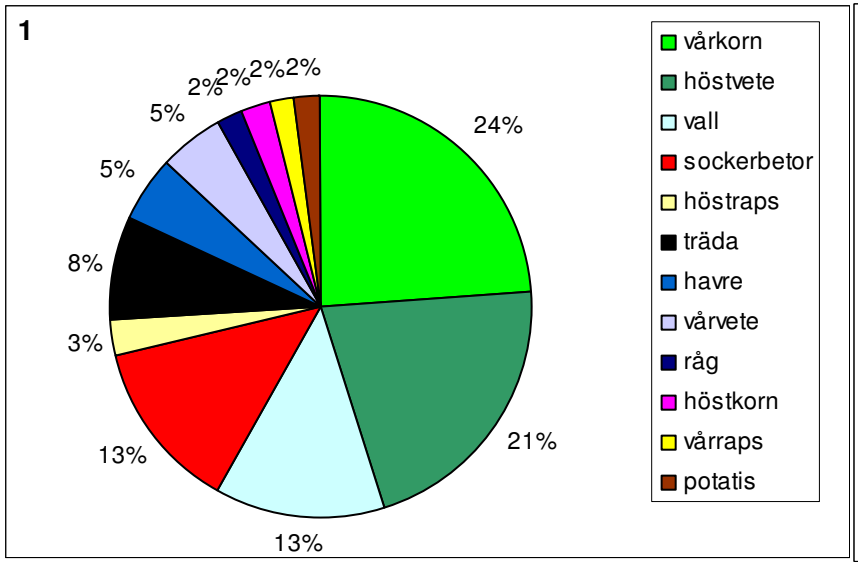

100-006
71
12

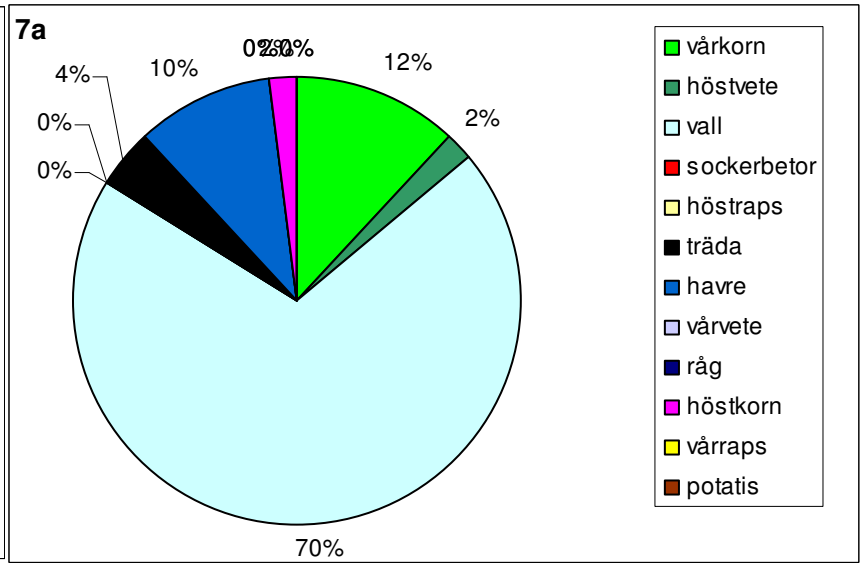

Stallgödslad areal (%)
0 - 10
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
61 - 70

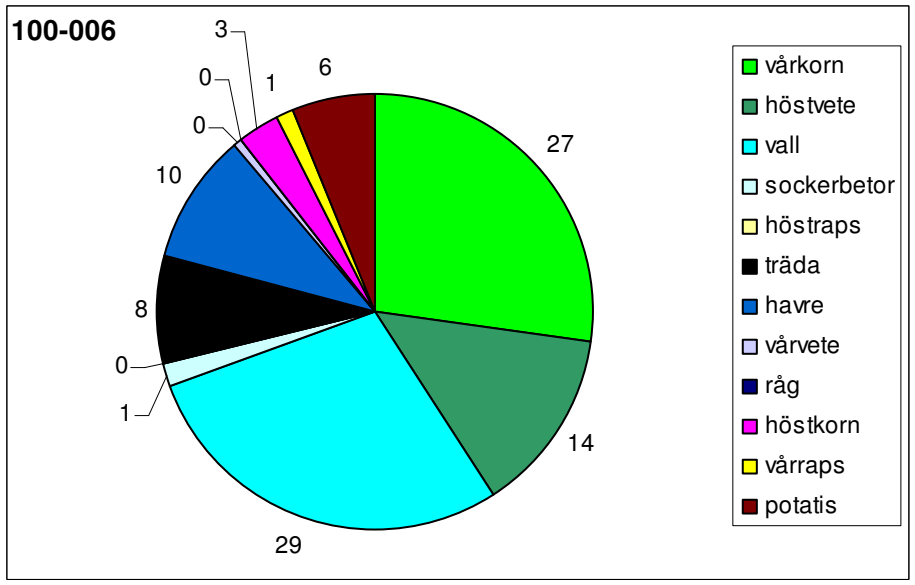

LOAM
LOAMY SAND
SANDY LOAM

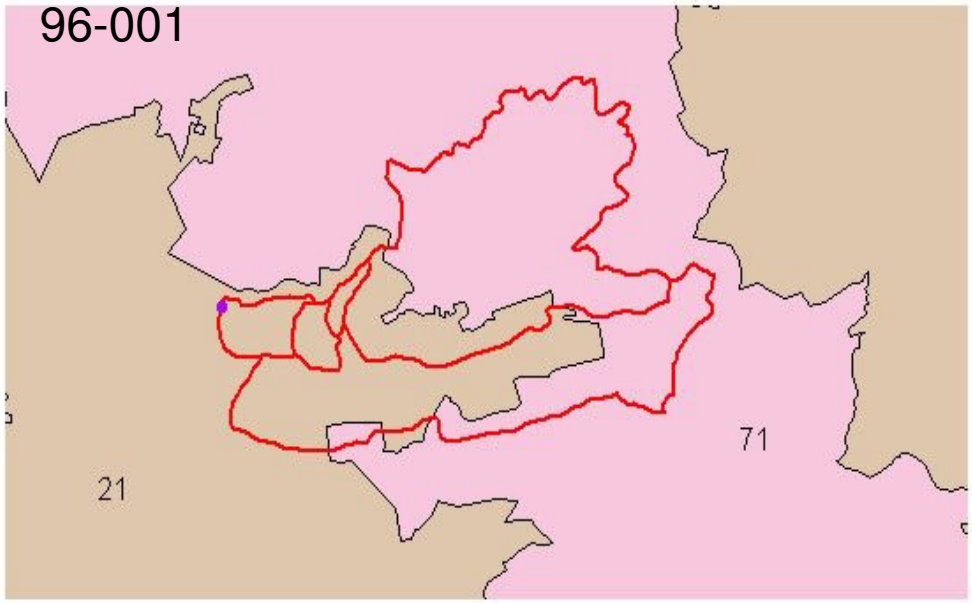

Åkermark areal (%)
0 - 10
11 - 20
21 - 30
31 - 40
41 - 50

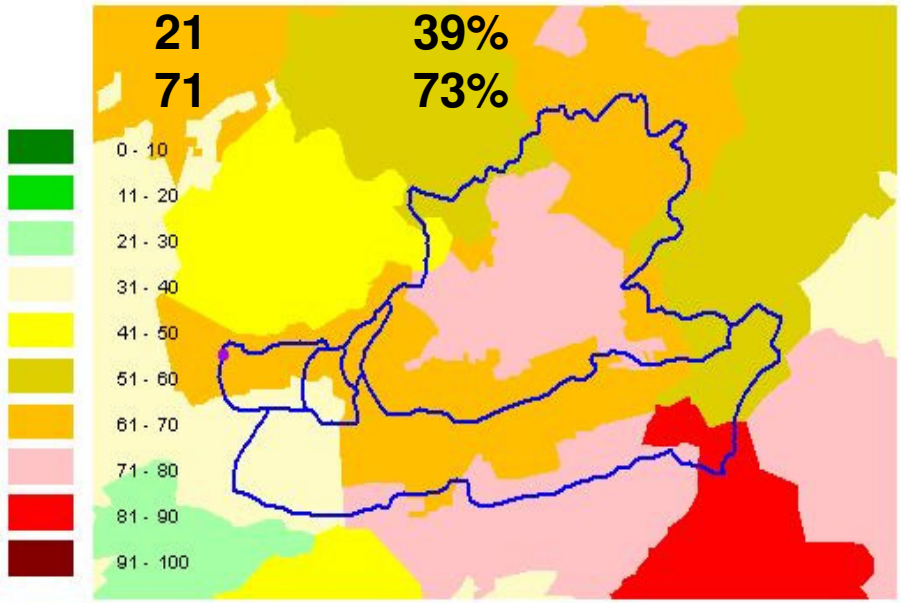
100-006

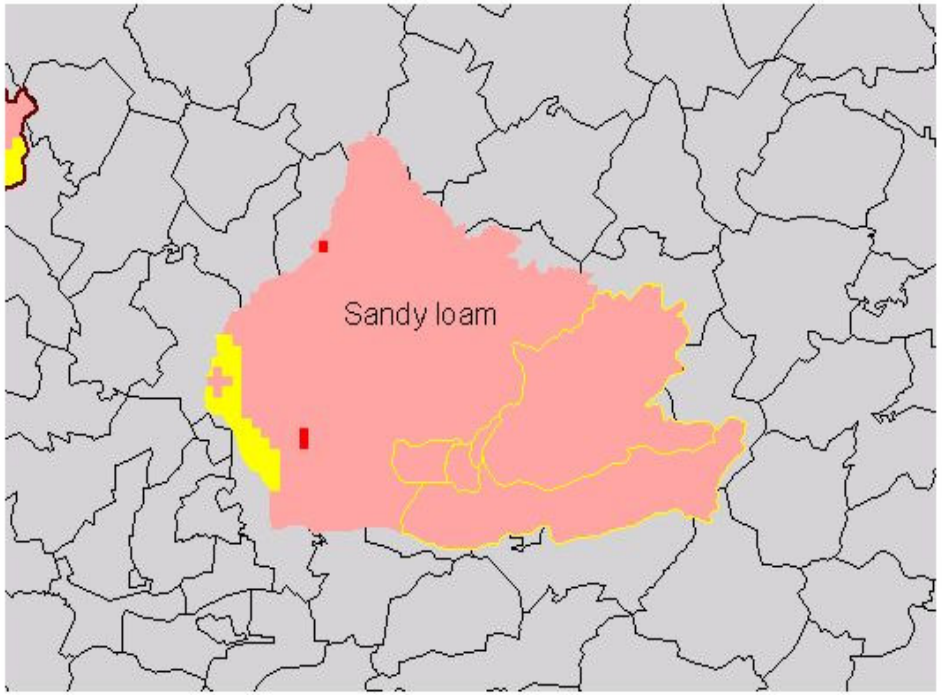

1
24%
21%
13%
13%
3%
8%
5%
5%
2%
2%
2%
2%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

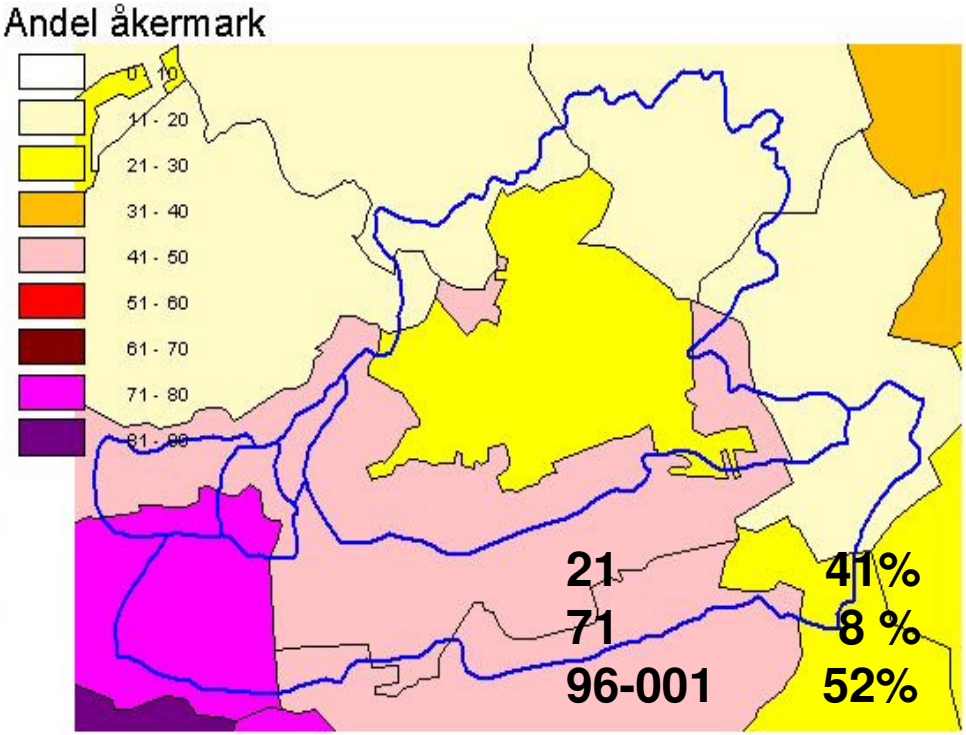

7a
12%
2%
70%
0%
0%
4%
10%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


100-006
27
14
29
1
0
8
10
0
0
1
6
3
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

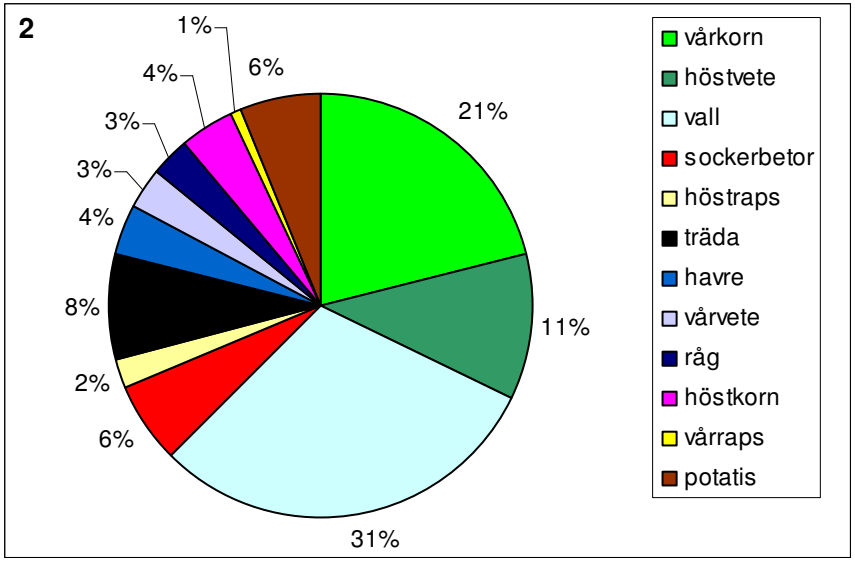

96-001
21
71

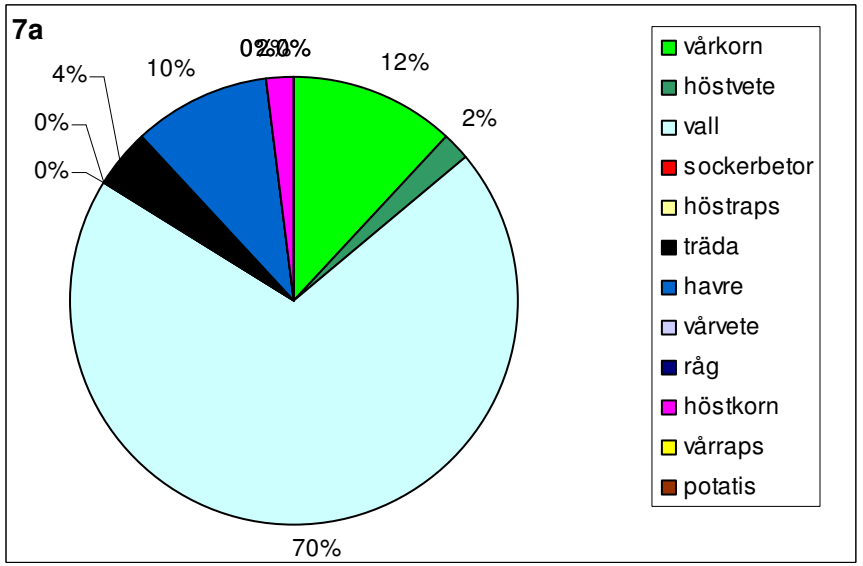

21 39%
71 73%
0 - 10
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
61 - 70
71 - 80
81 - 90
91 - 100

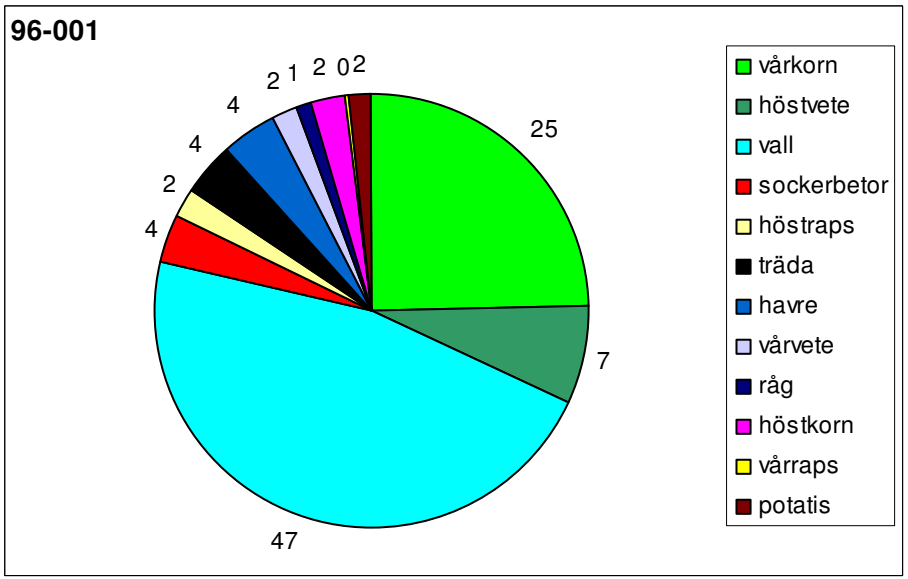

Sandy loam


Andel åkermark
10
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
61 - 70
71 - 80
81 - 90
21 41%
71 8 %
96-001 52%

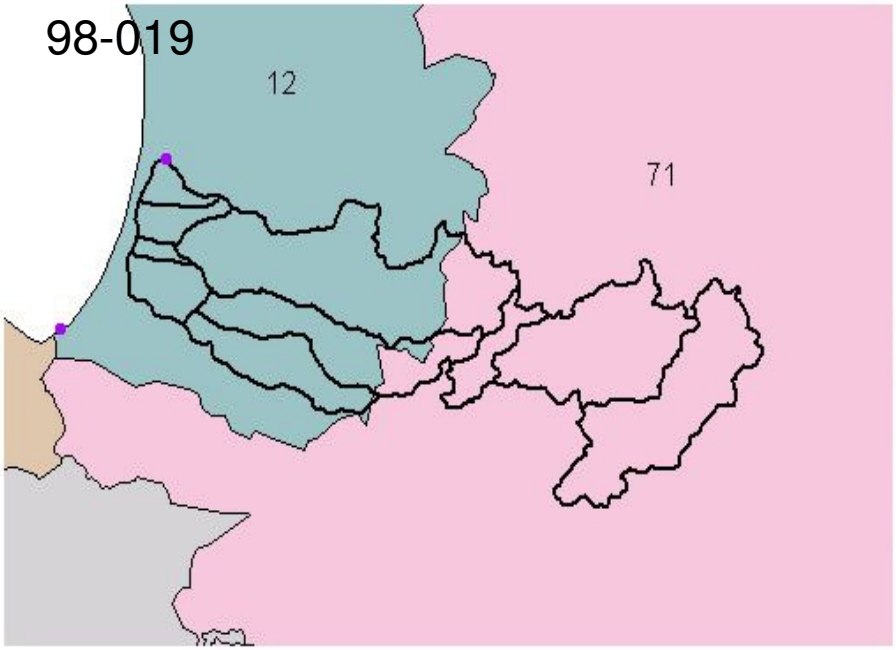
96-001

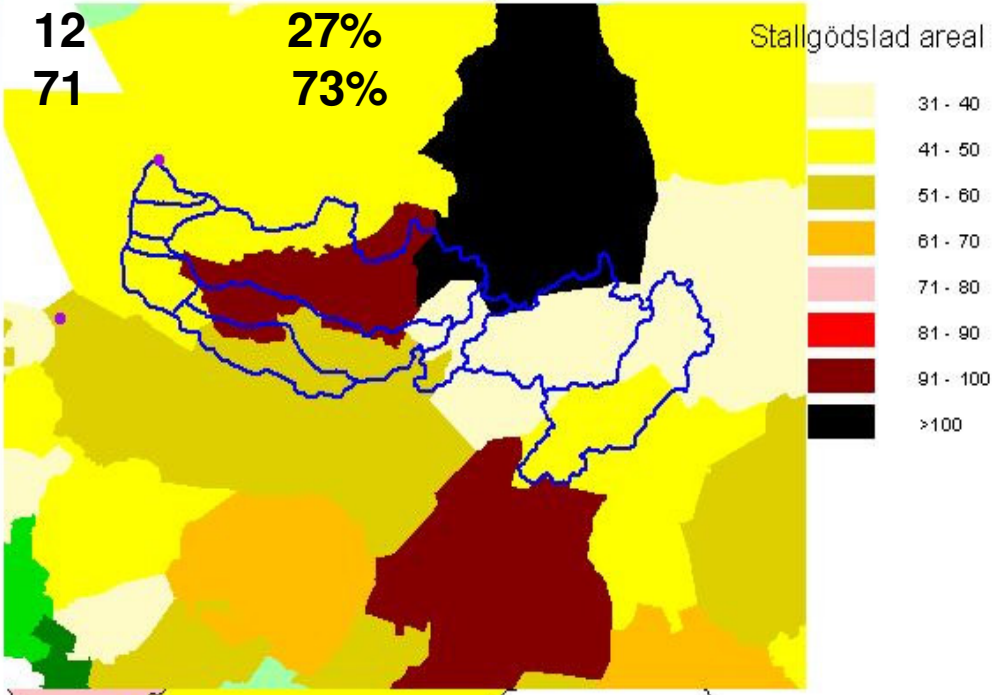


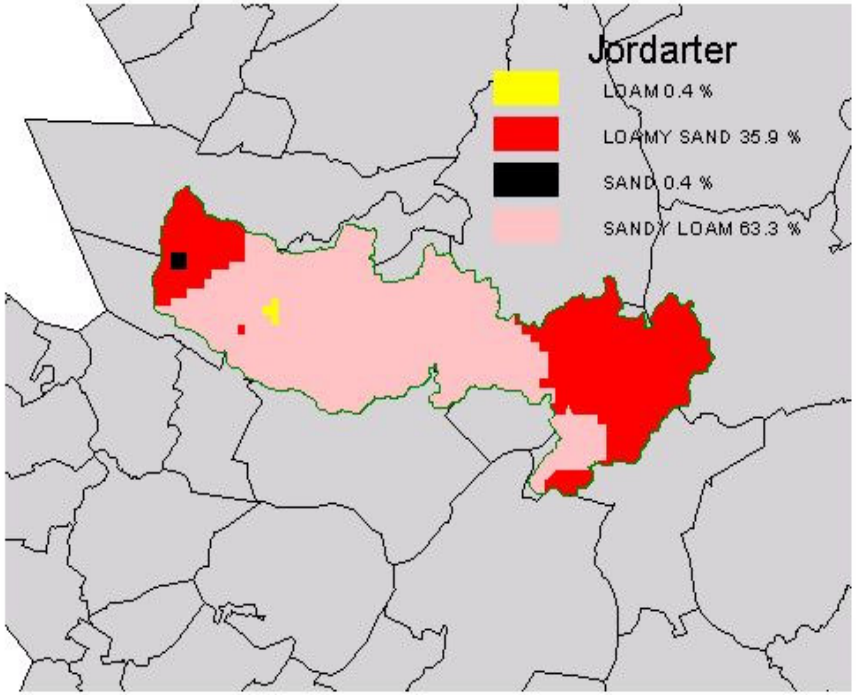


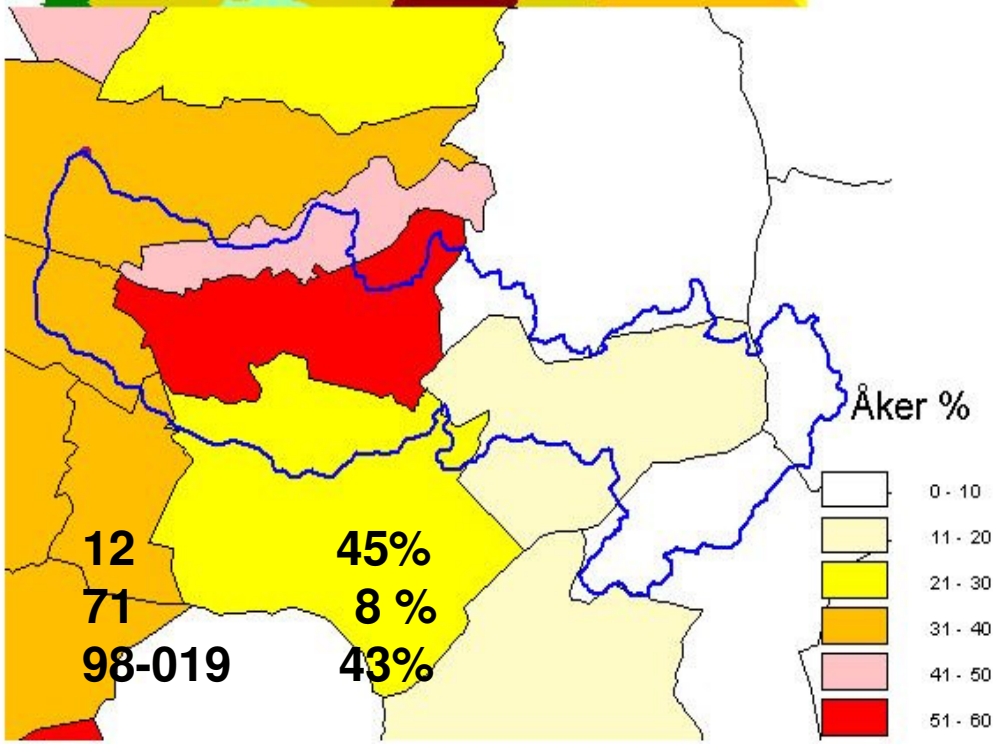


Omr.	q
21	310
71	430
96-001	430

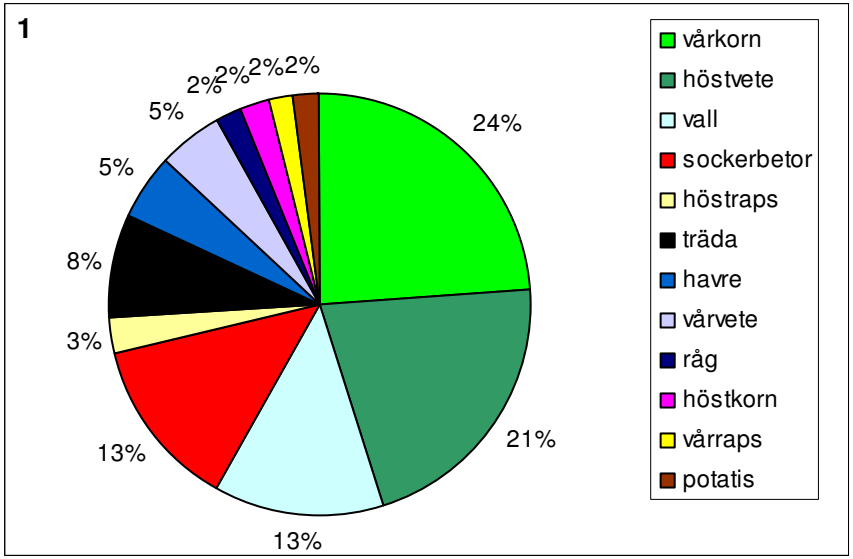

98-019
12
71

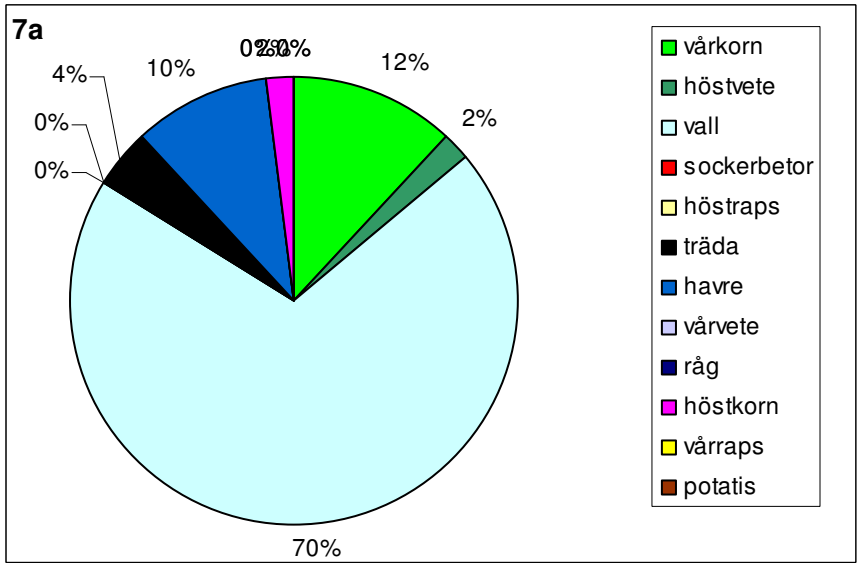

12
27%
71
73%
Stallgödslad areal
31 - 40
41 - 50
51 - 60
61 - 70
71 - 80
81 - 90
91 - 100
>100

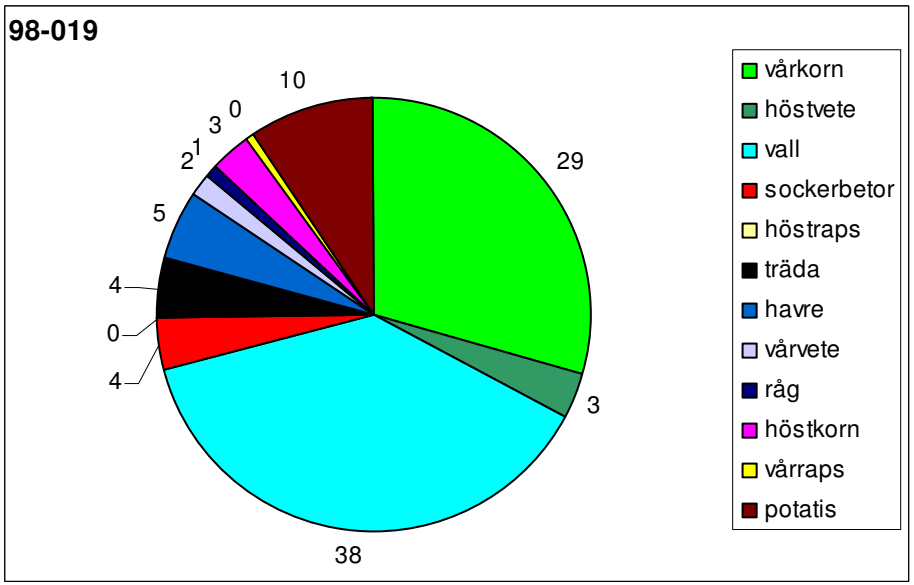

Jordarter
LOAM 0.4 %
LOAMY SAND 35.9 %
SAND 0.4 %
SANDY LOAM 63.3 %


Åker %
0 - 10
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
12
45%
71
8 %
98-019
43%

98-019

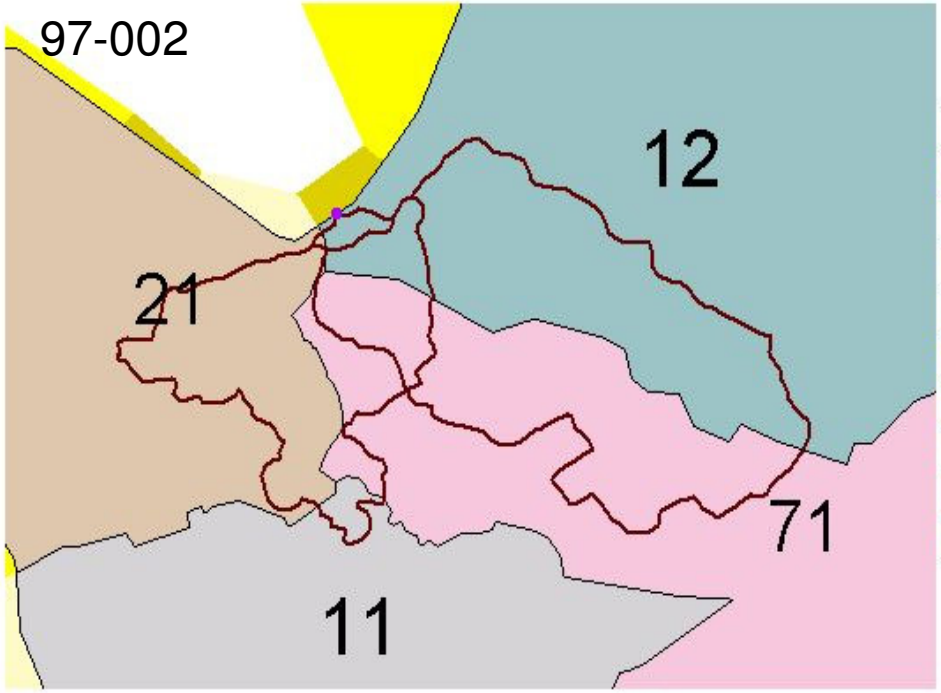


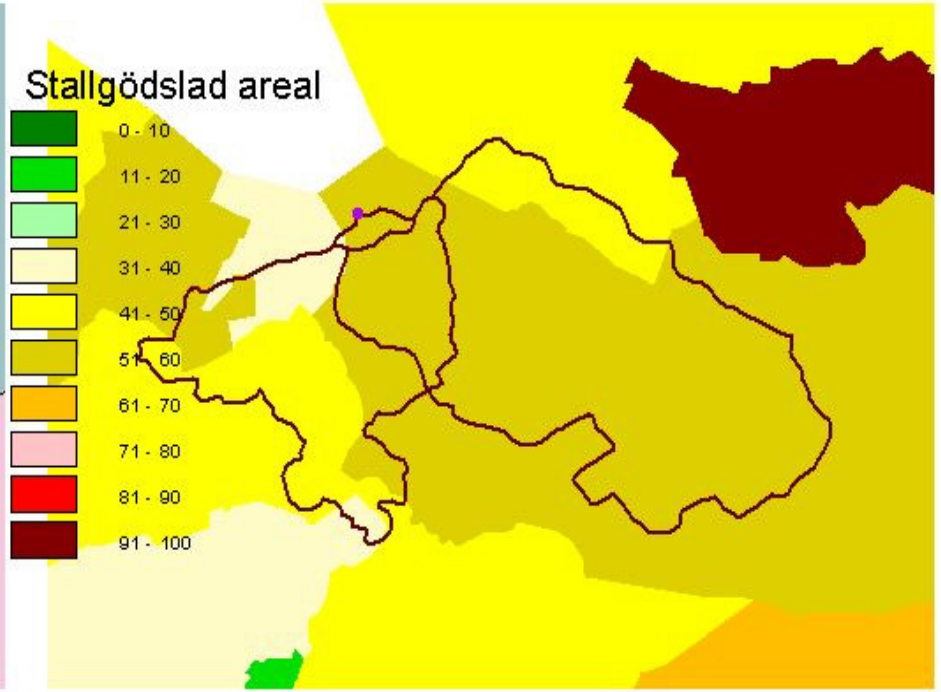


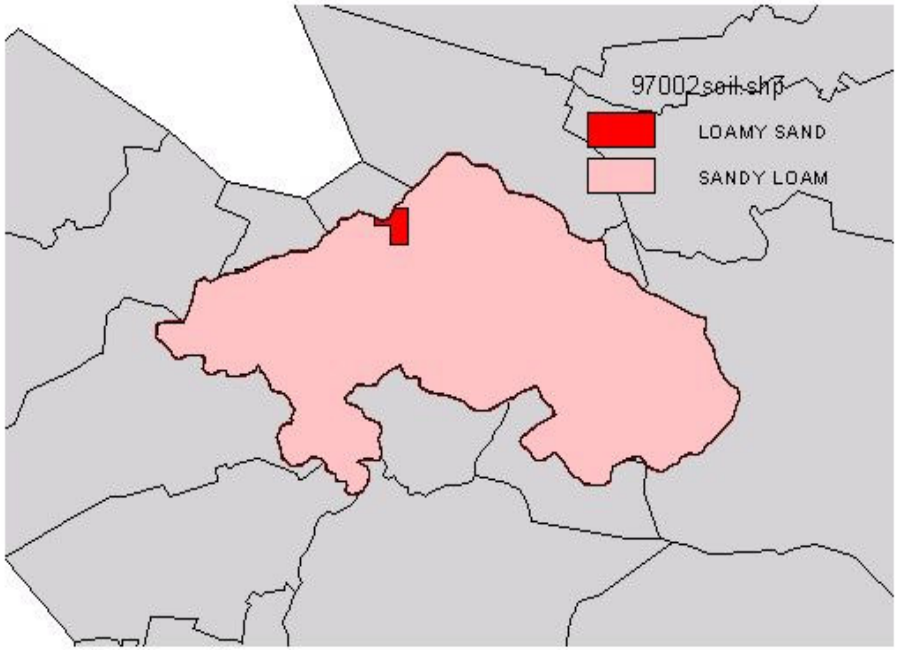


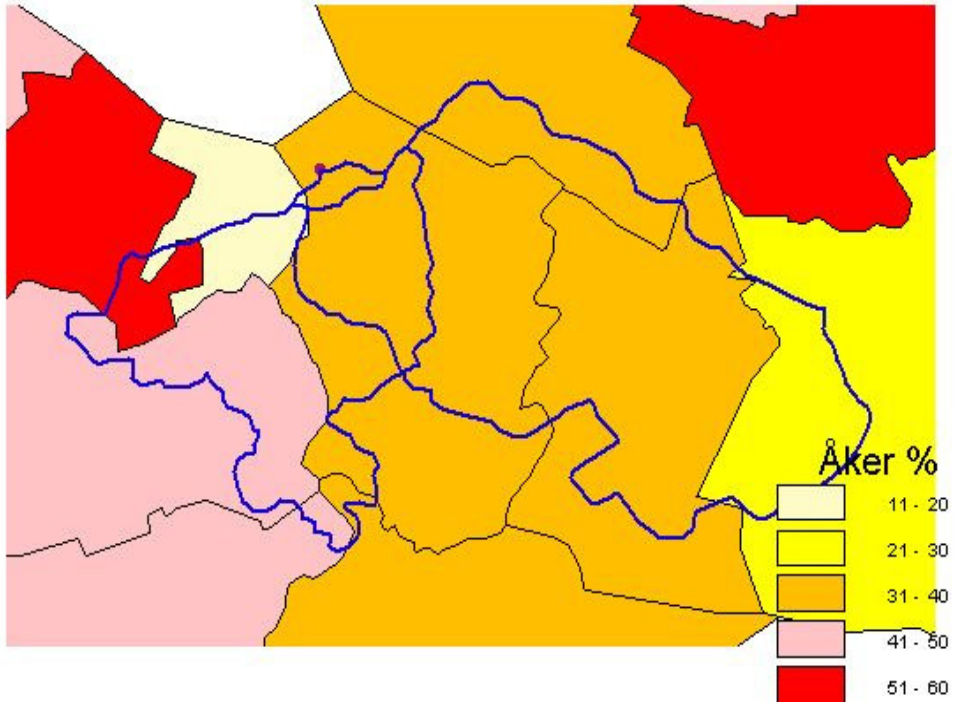
Omr.	SG	Vall %	q
12	27	13	450
71	73	70	430
98-019	54	39	440

97-002

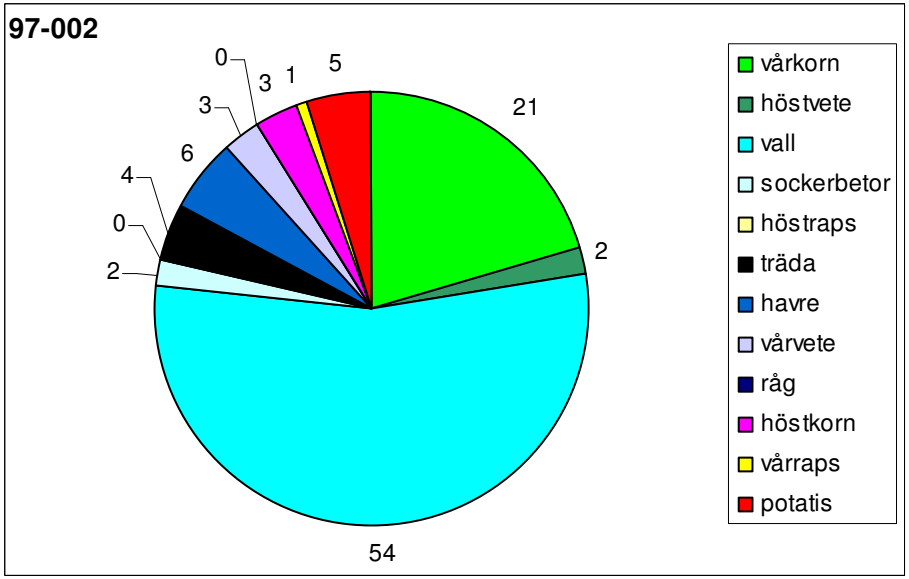

12
21
71
11

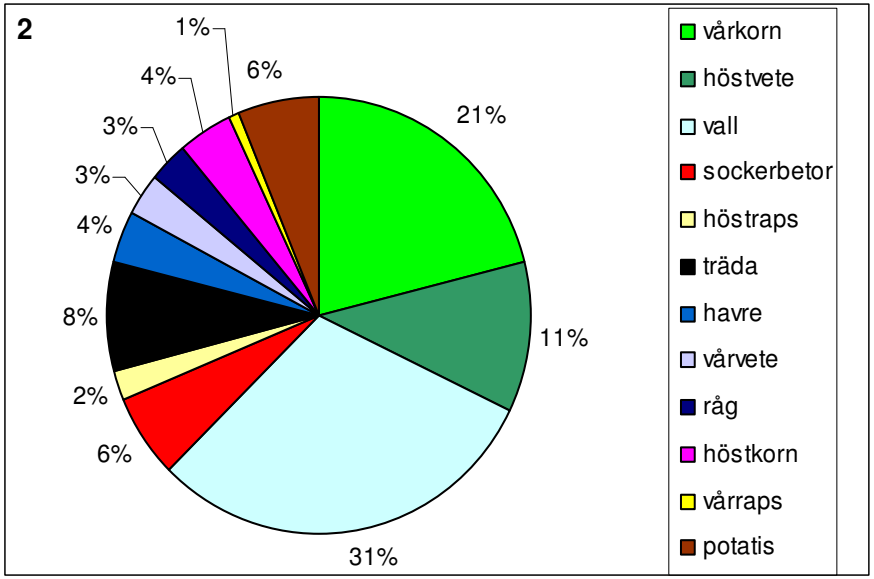

Stallgödslad areal
0 - 10
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
61 - 70
71 - 80
81 - 90
91 - 100

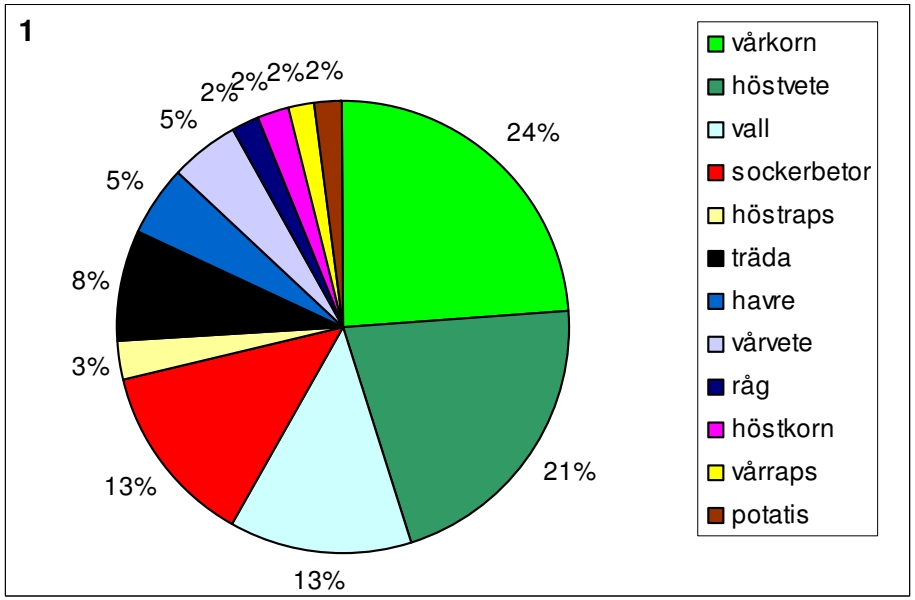

97002soil.shp
LOAMY SAND
SANDY LOAM


Åker %
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60

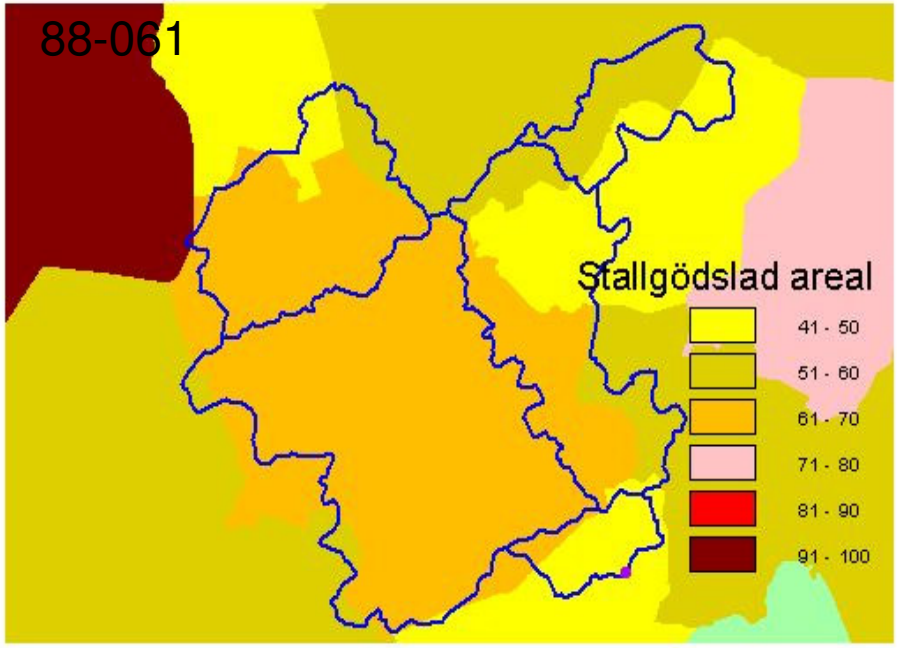
97-002

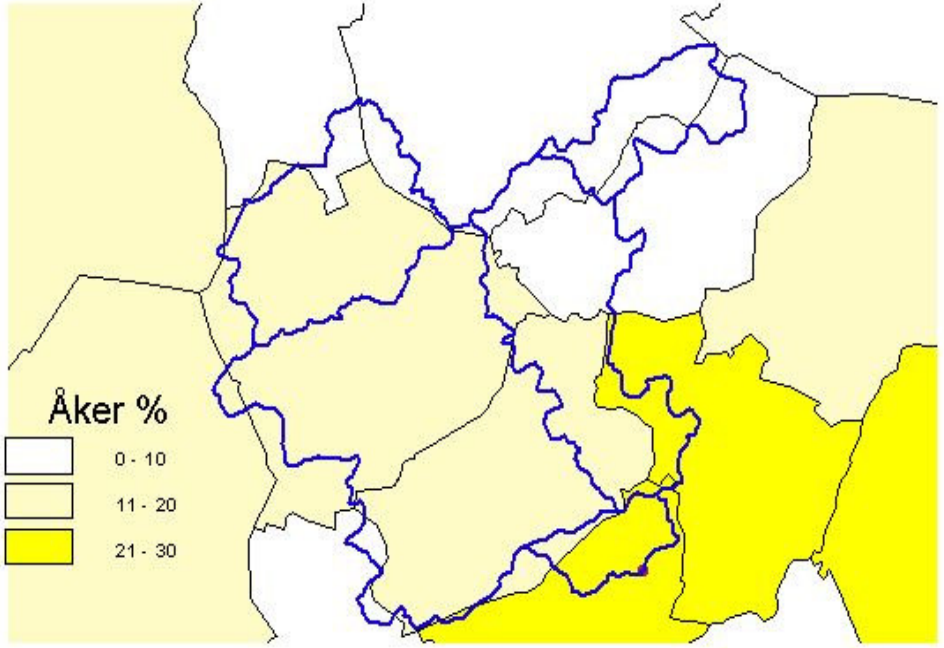


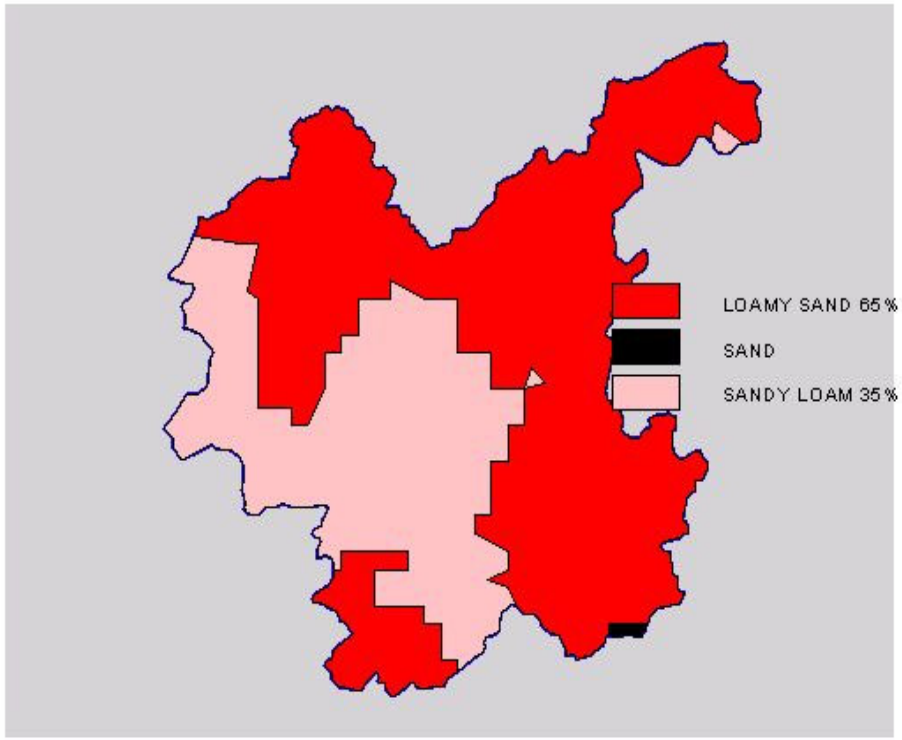




PO	SG	Åker	q
11	27	58	290
12	27	45	450
21	39	41	310
71	73	8	430
97002	40-60	48	460



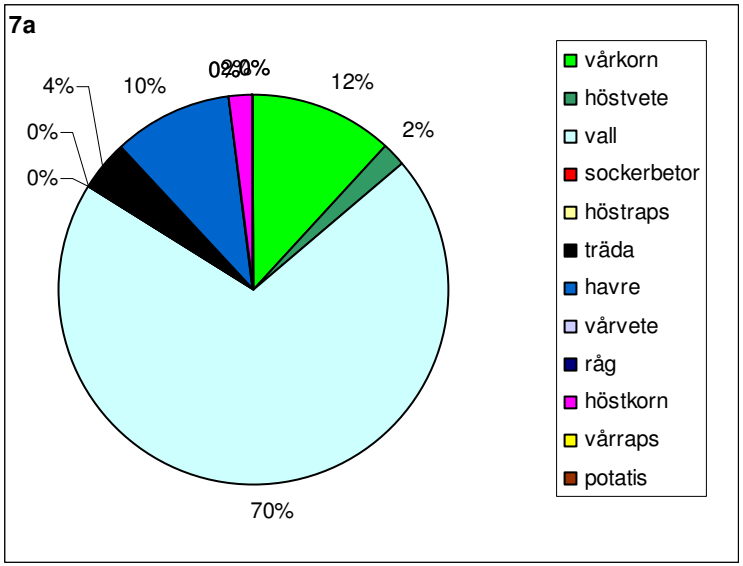




PO	q
71	430
88-061	410

Skog?
Punktkällor?
Pasture?

88-061


7a
4%
10%
12%
2%
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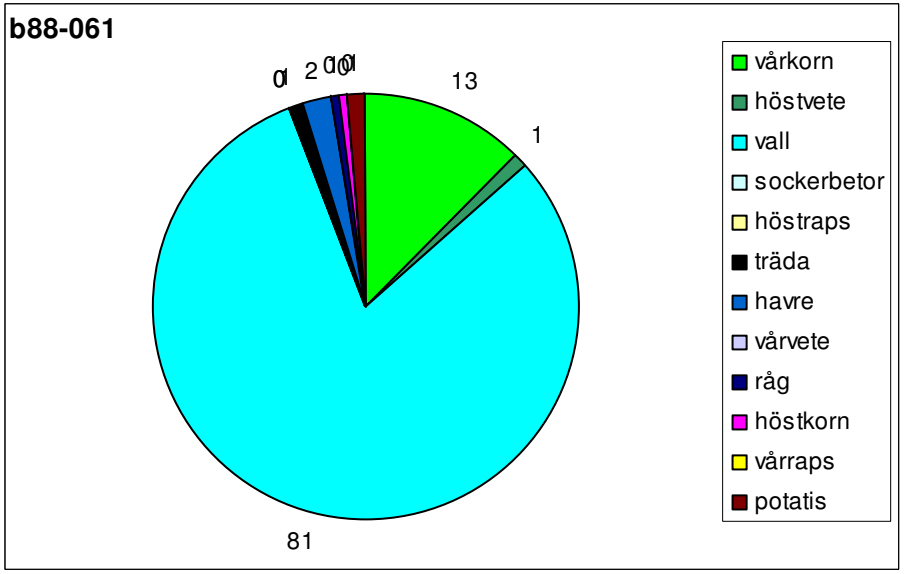
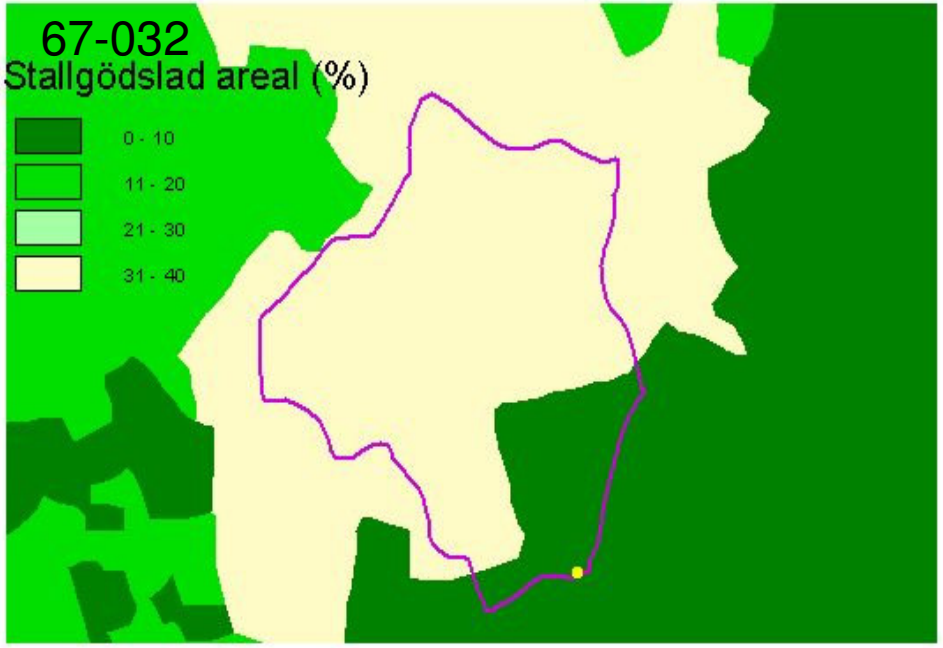
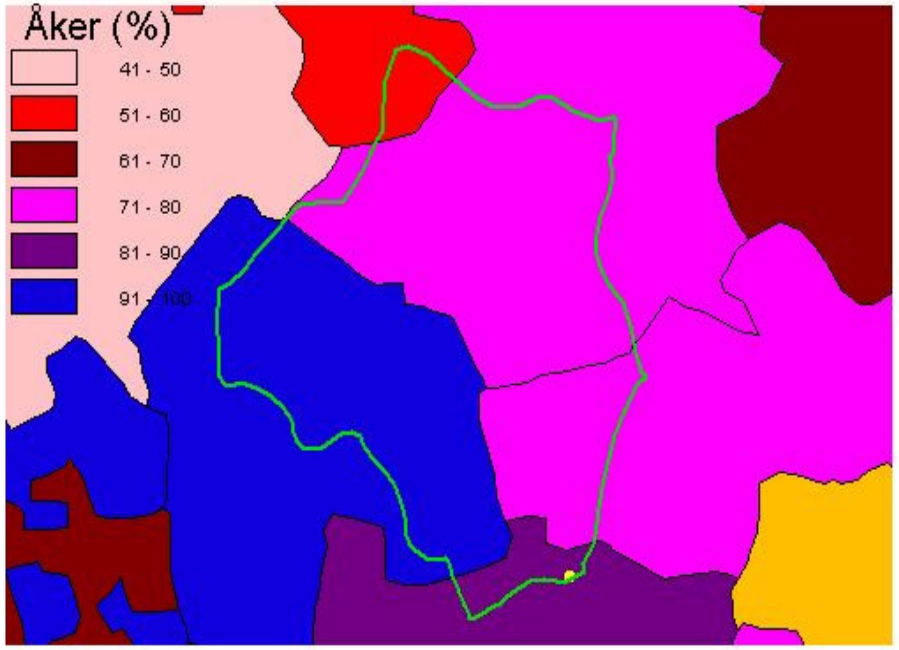
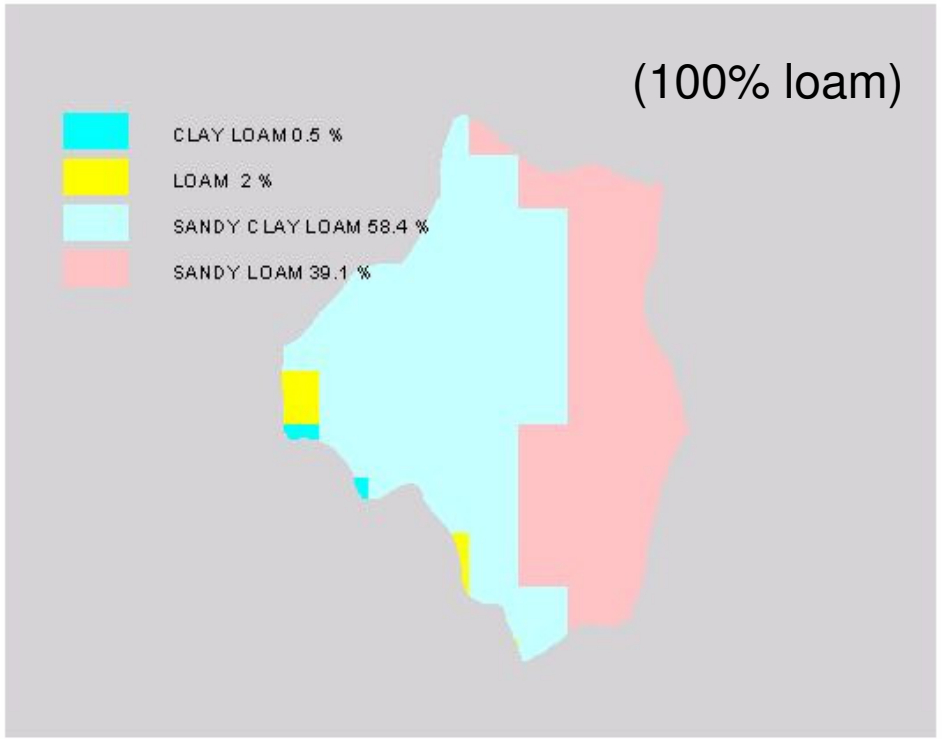
70%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


b88-061
13
1
81
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

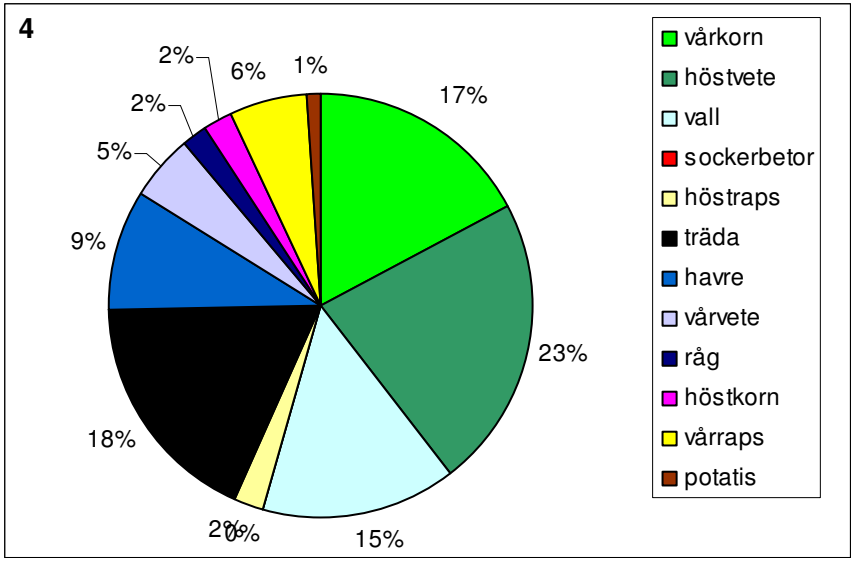


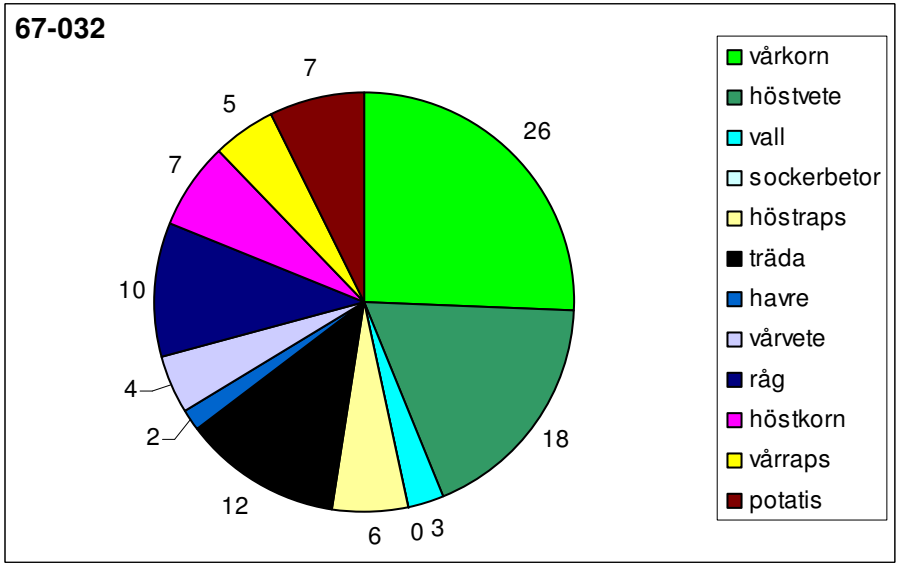




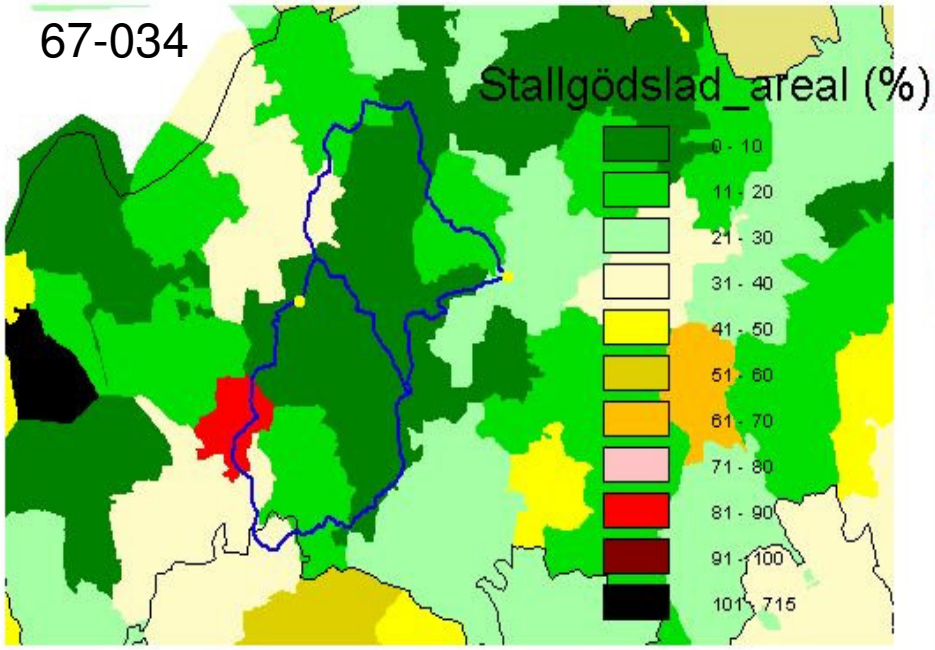
PO	q	Åker%	Stallg.
40	190	34%	21%
80	190	8 %	61%
67-032	160		

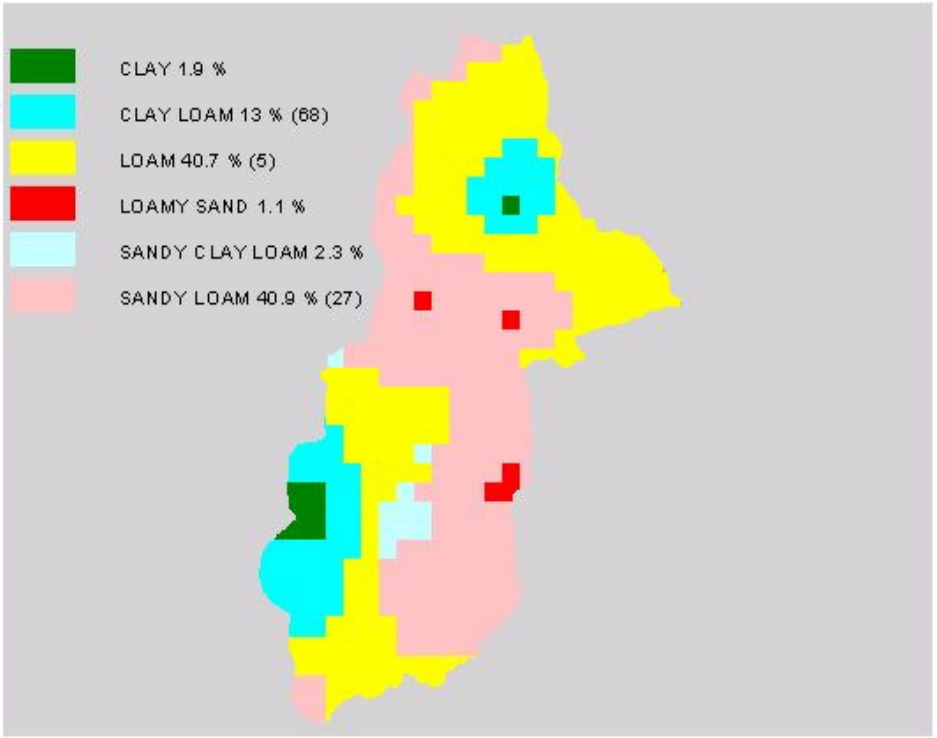
67-032

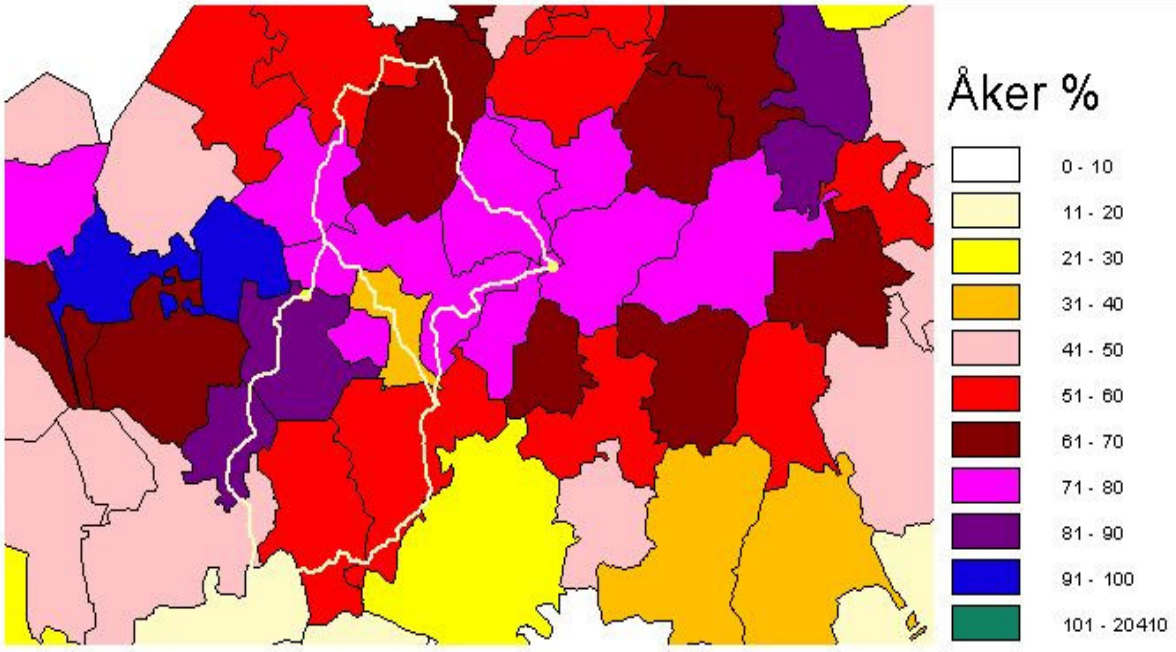

4
2%
6%
1%
17%
2%
5%
9%
18%
2%
0%
15%
23%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


67-032
7
5
26
7
10
4
2
18
12
6
0
3
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

67-034

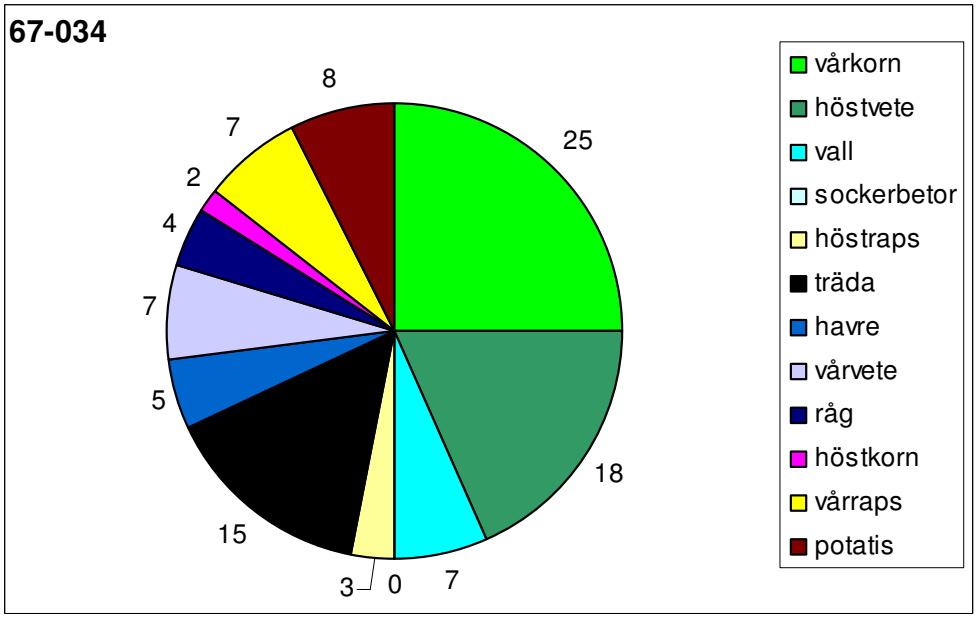


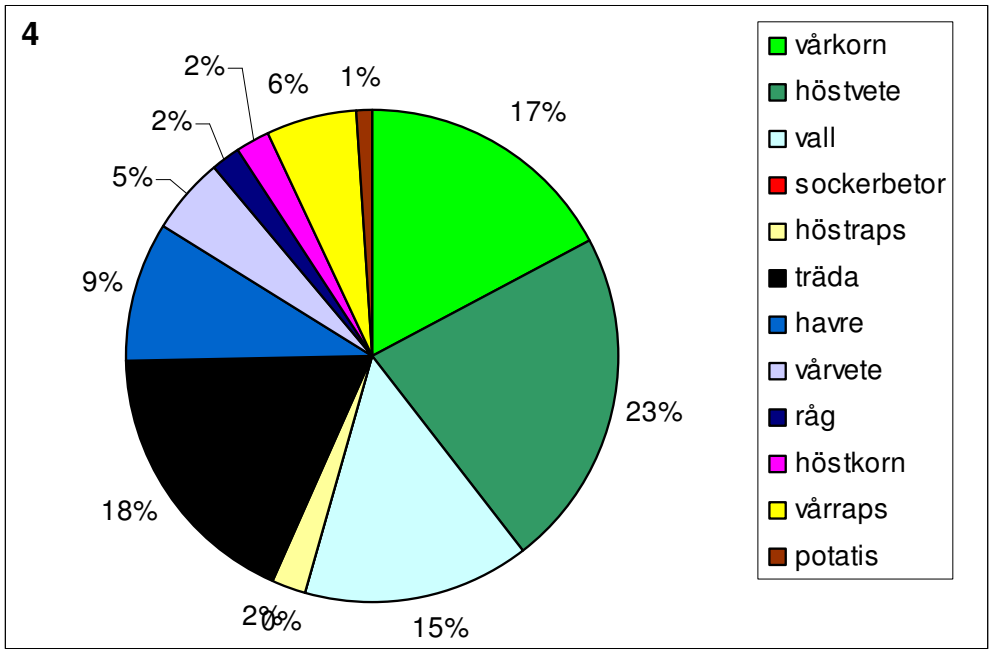




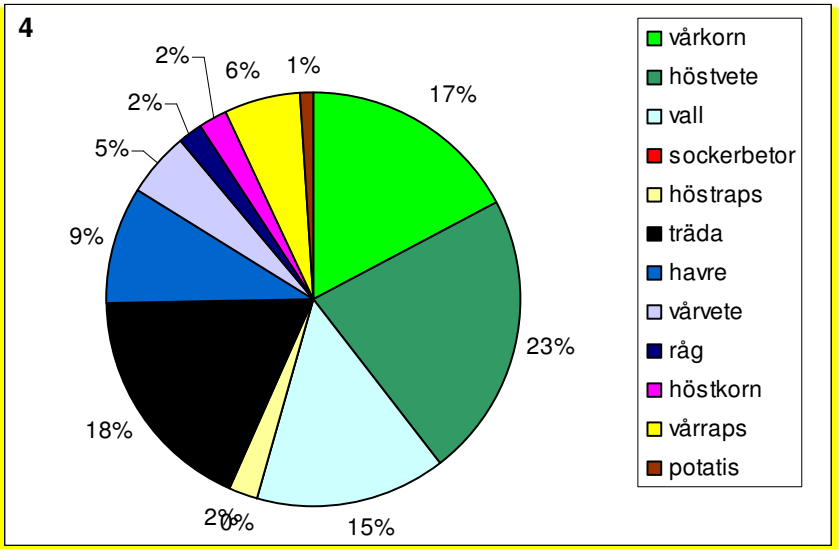
PO	q	Åker%	Stallg.
40	190	34%	21%
67-034	160		

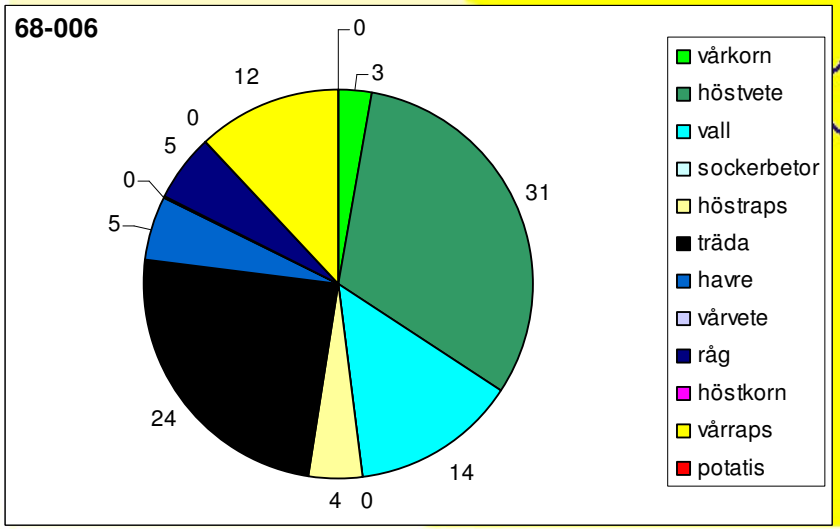
67-034

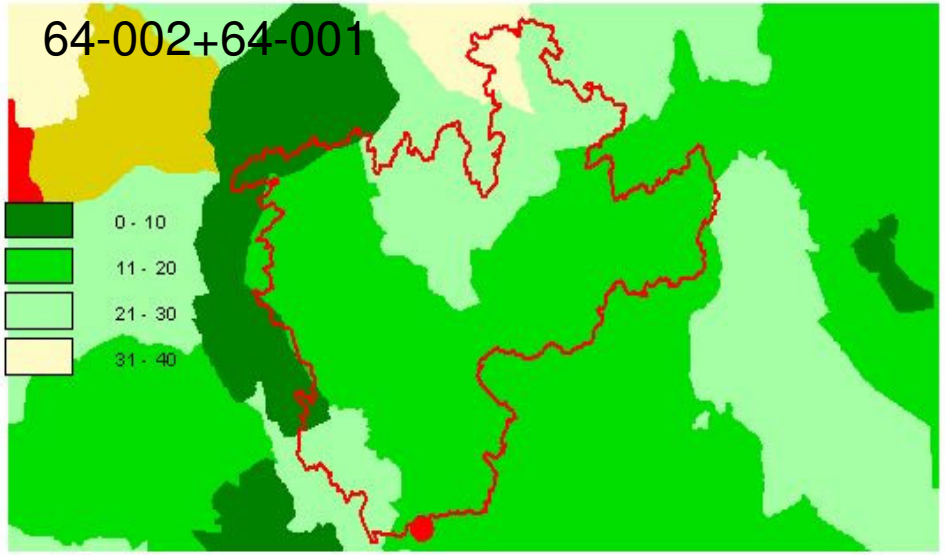

67-034
8
25
7
2
4
7
5
15
3
0
7
18
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

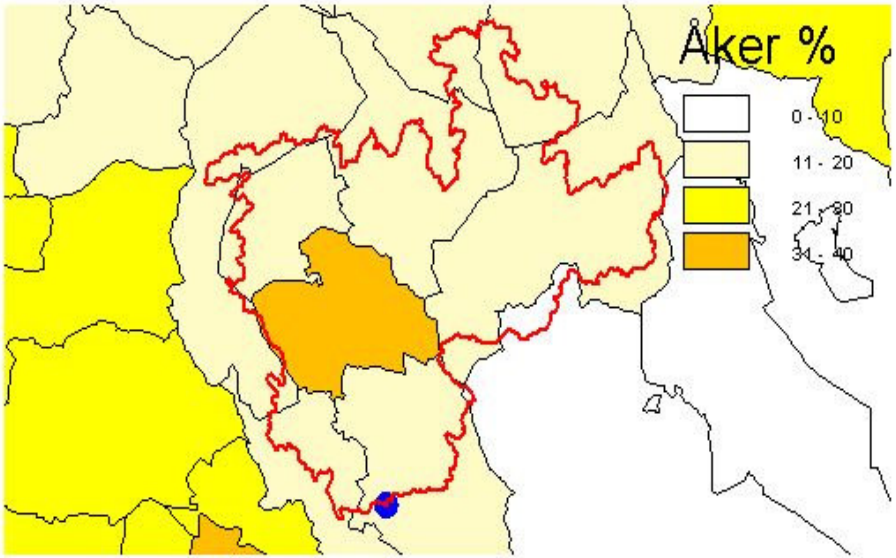

4
2%
6%
1%
17%
2%
5%
9%
18%
2%
0%
15%
23%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

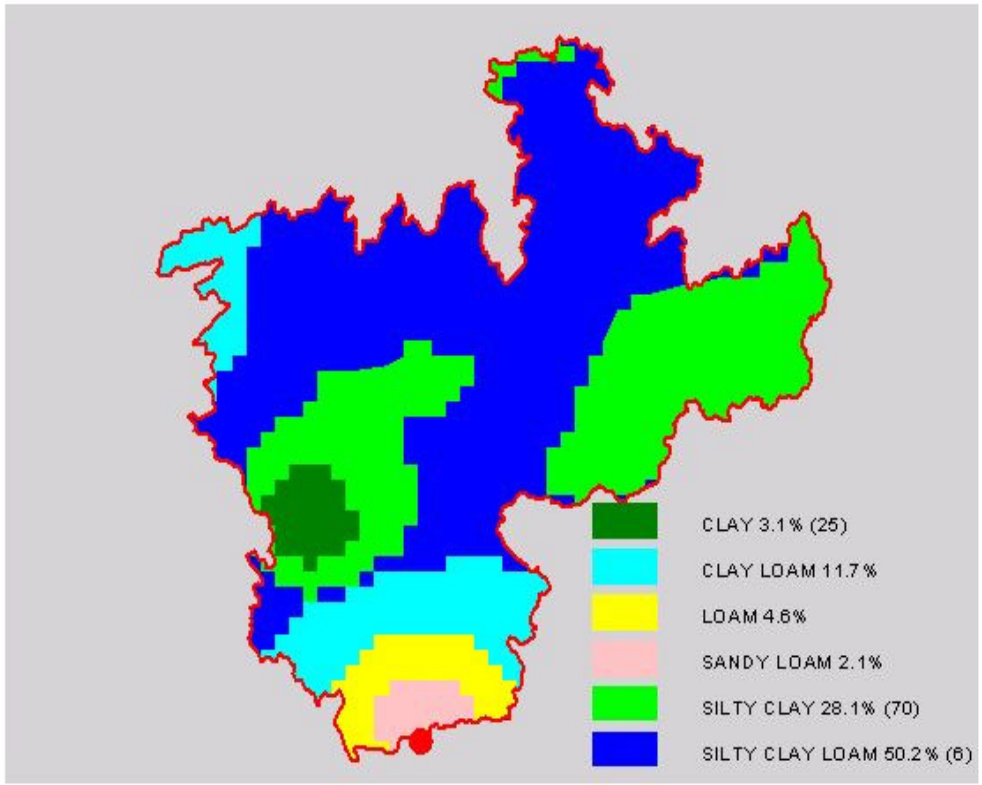
68-006
7 km2
62 % åker
Ler 100%
50 % stallgödslad areal
Q=180 mm





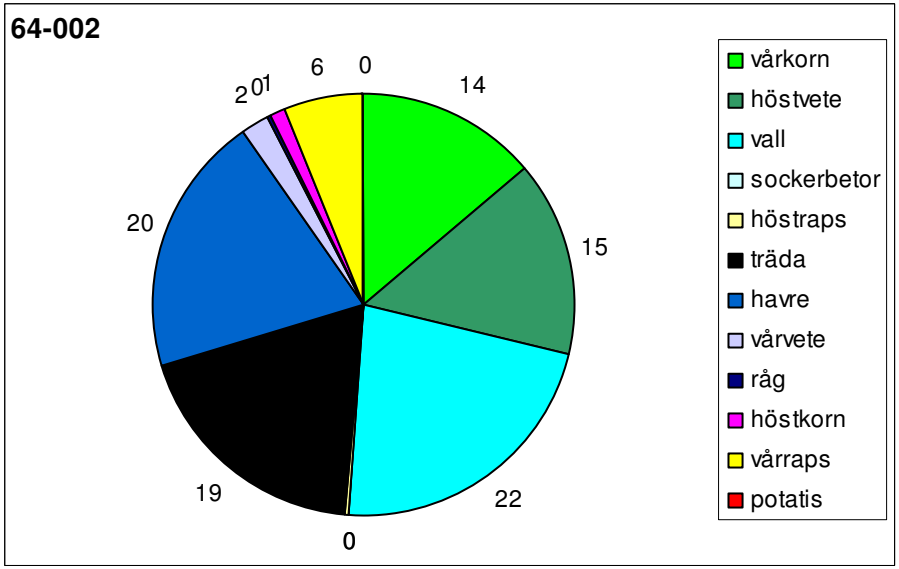


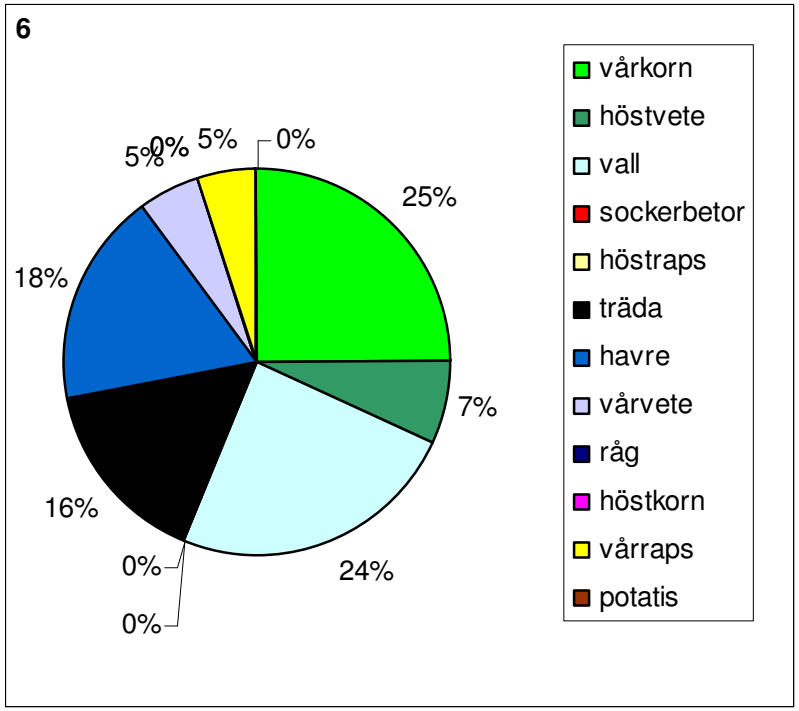


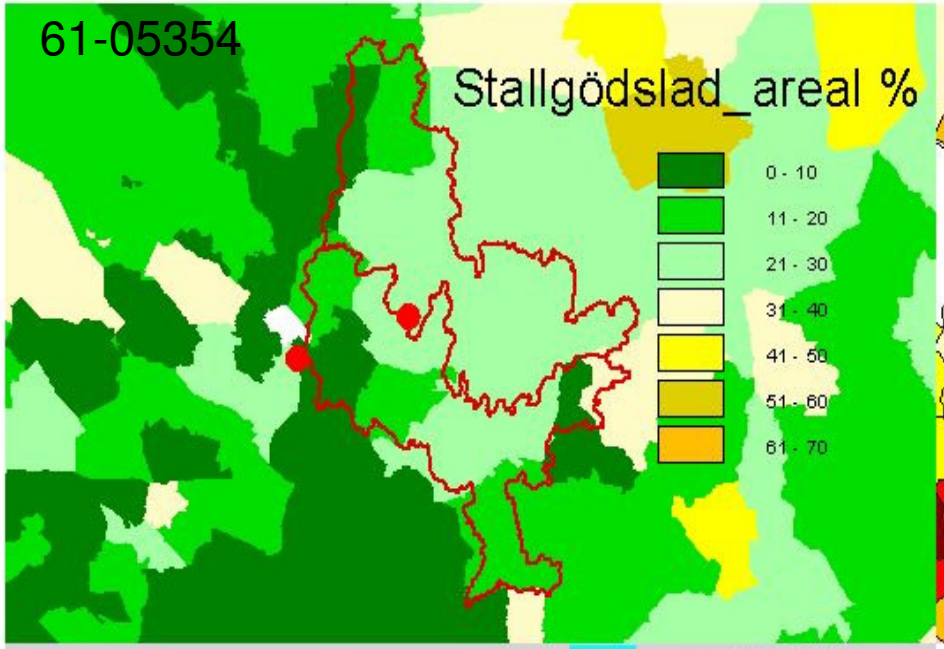


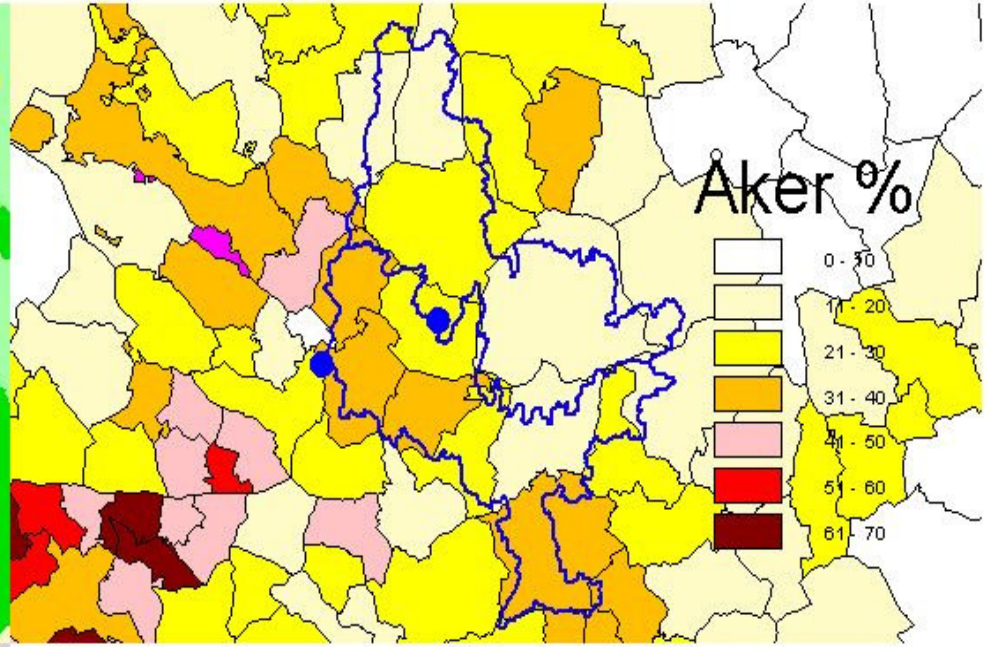
PO	q	Åker%	Stallg.
60	**240**	19%	23%
64-001	**200**	6%	
64-002	**200**	28%	

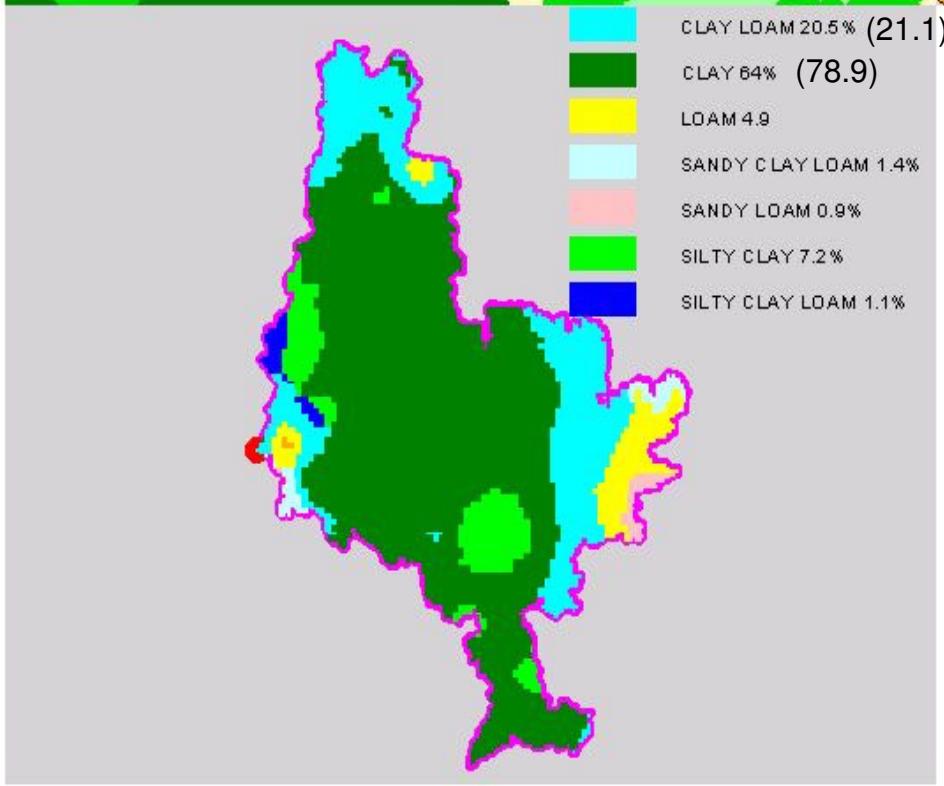
64-002


64-002
14
15
22
0
19
20
2
1
6
0
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

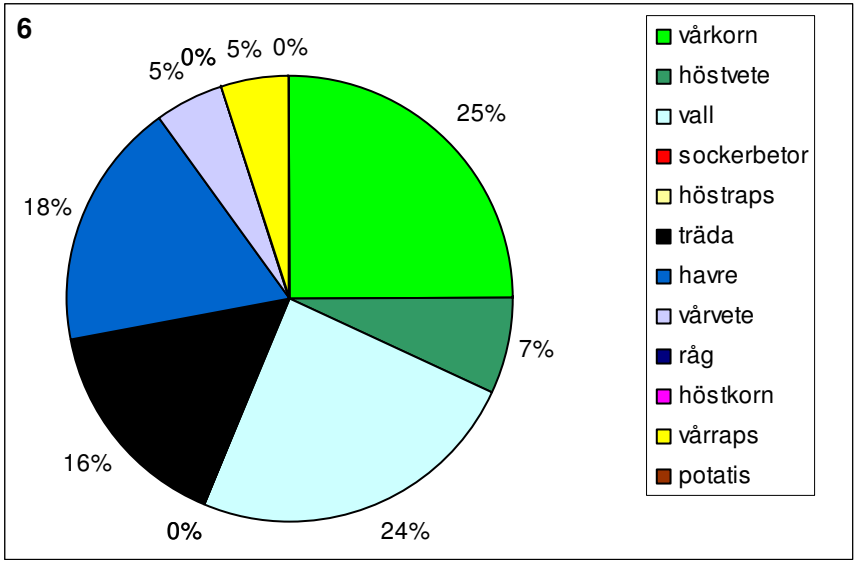

6
25%
7%
24%
0%
0%
16%
18%
5%
0%
5%
0%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

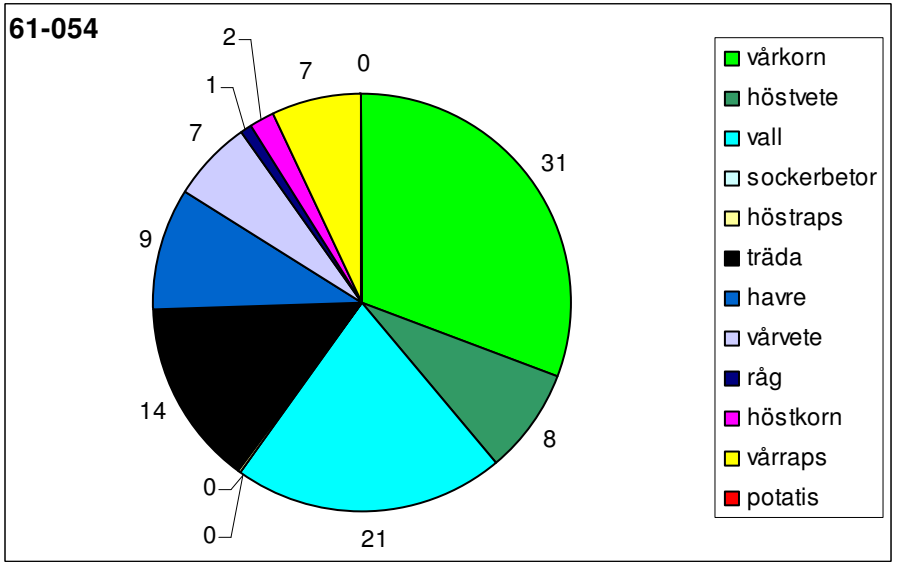


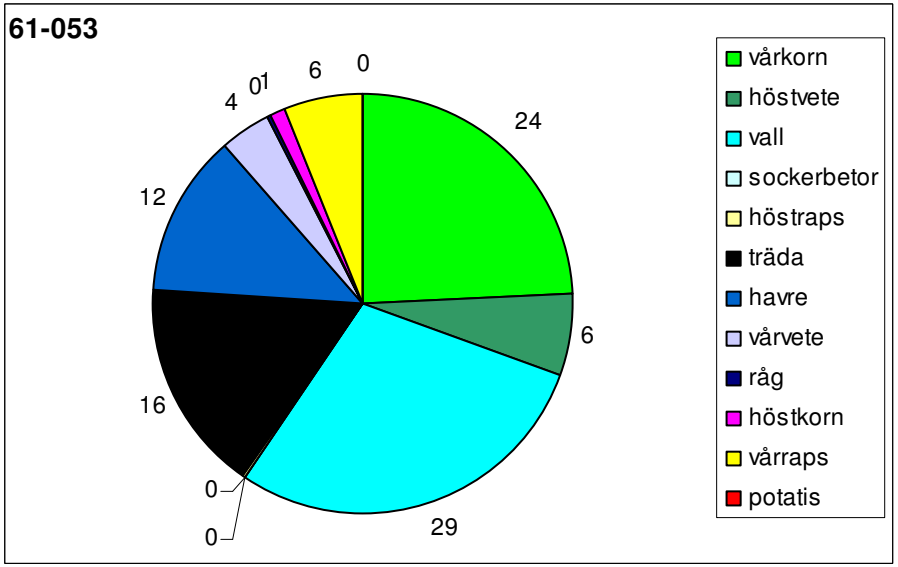


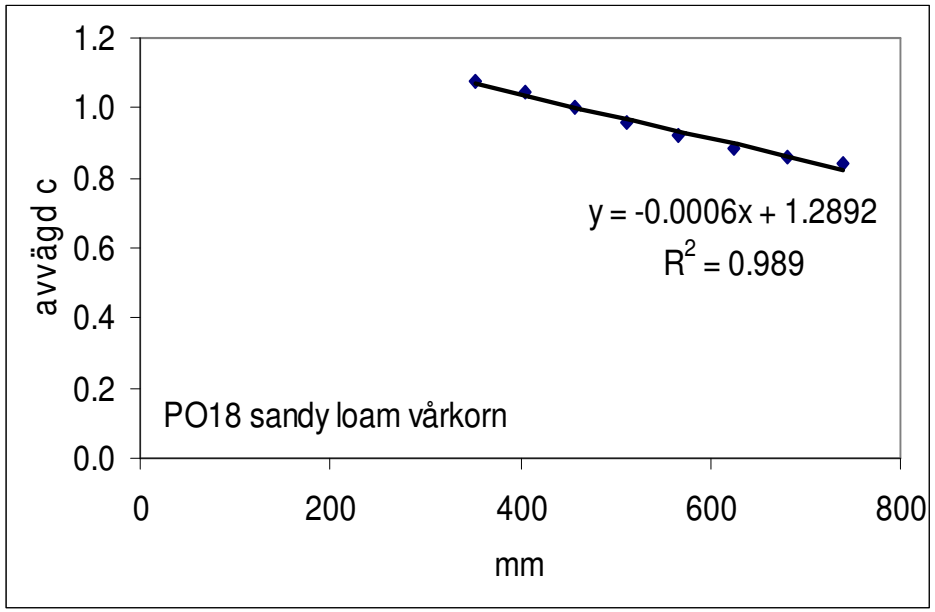


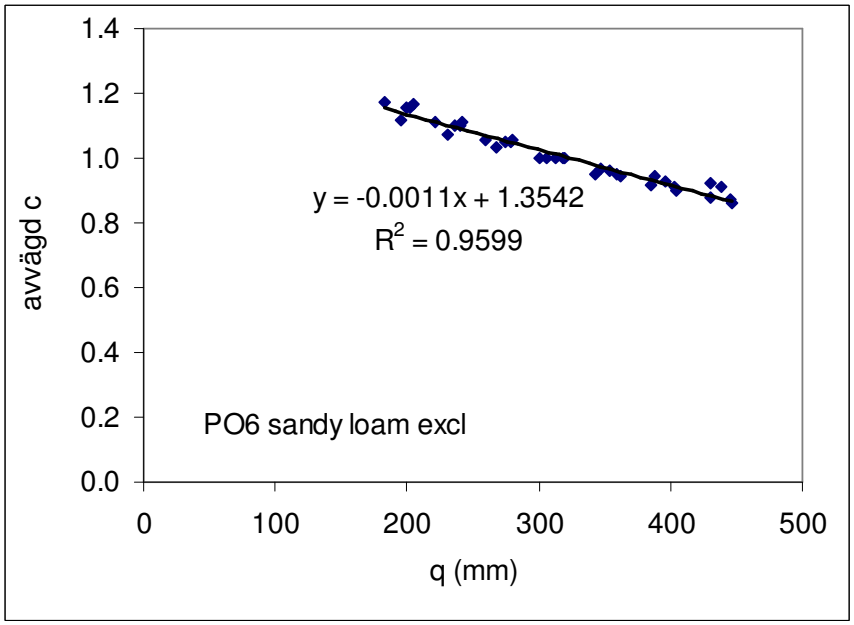
PO	q	Åker%	Stallg.
60	**240**	19%	23%
61-053	**200**	20%	
61-054	**200**	36%	

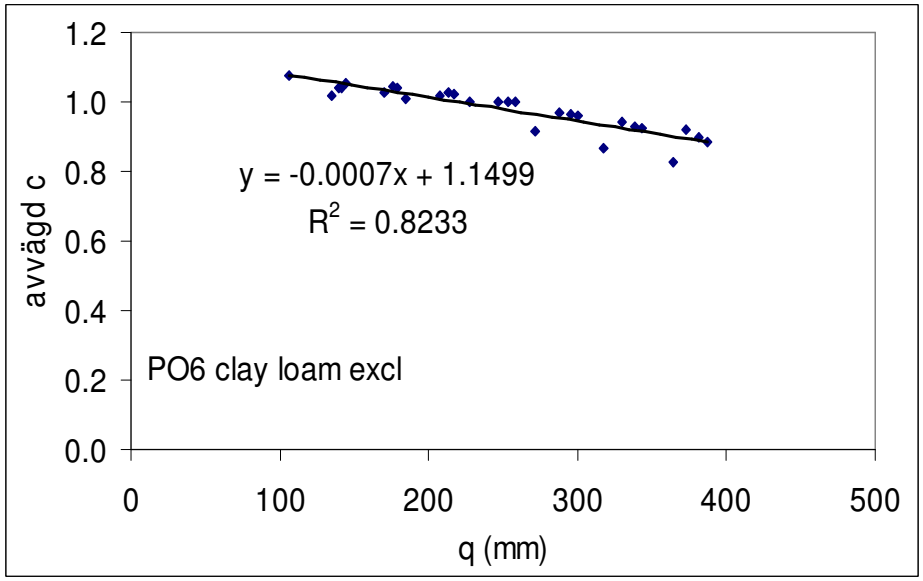

6
25%
7%
24%
0%
16%
18%
5%
0%
5%
0%
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis

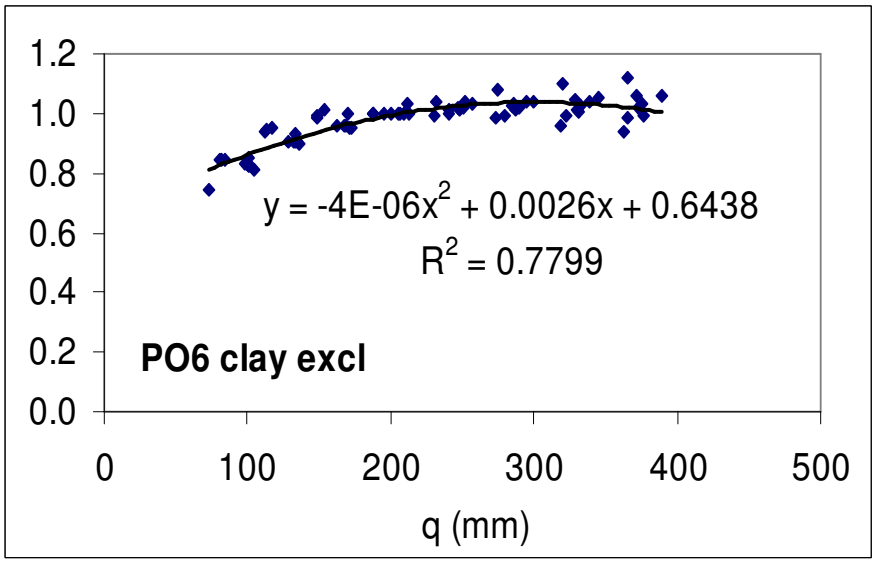

61-054
31
8
21
0
0
14
9
7
1
2
7
0
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


61-053
24
6
29
0
0
16
12
4
0
1
6
0
vårkorn
höstvete
vall
sockerbetor
höstraps
träda
havre
vårvete
råg
höstkorn
vårraps
potatis


avvägd c
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
200
400
600
800
mm
y = -0.0006x + 1.2892
R2 = 0.989
PO18 sandy loam vårkorn


avvägd c
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
q (mm)
y = -0.0011x + 1.3542
R2 = 0.9599
PO6 sandy loam excl


avvägd c
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
q (mm)
y = -0.0007x + 1.1499
R2 = 0.8233
PO6 clay loam excl


1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
q (mm)
y = -4E-06x2 + 0.0026x + 0.6438
R2 = 0.7799
PO6 clay excl