Soil Analysis Status and Trends

Teagasc — AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

County	Kilkenny
Year	2016
Enterprise	All Farms
Number of Samples	2,833

Soil P Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
20%	28%	24%	28%

Trend in Soil P Index

Legend: P Index 4, P Index 3, P Index 2, P Index 1

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
P Index 4	29%	30%	32%	23%	25%	22%	30%	29%	25%	28%
P Index 3	26%	27%	27%	23%	27%	25%	23%	25%	23%	24%
P Index 2	27%	26%	29%	31%	27%	30%	26%	27%	28%	28%
P Index 1	18%	16%	12%	22%	21%	23%	21%	20%	23%	20%

Soil K Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
9%	34%	27%	29%

Trend in Soil K Index

Legend: K Index 4, K Index 3, K Index 2, K Index 1

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
K Index 4	29%	32%	28%	23%	21%	25%	25%	26%	27%	29%
K Index 3	26%	25%	28%	29%	26%	27%	28%	29%	27%	27%
K Index 2	34%	34%	36%	41%	43%	38%	39%	35%	37%	34%
K Index 1	11%	9%	8%	7%	11%	10%	9%	10%	9%	9%

Soil pH
(Good Fertility > pH6.2)

<5.5	5.5-5.9	5.9-6.2	6.2-6.5	>6.5
8%	18%	18%	19%	36%

Trend in Soil pH

Legend: >6.5, 6.2-6.5, 5.9-6.2, 5.5-5.9, <5.5

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
>6.5	19%	20%	28%	23%	26%	27%	25%	25%	31%	36%
6.2-6.5	16%	15%	17%	19%	18%	20%	19%	18%	19%	19%
5.9-6.2	21%	20%	17%	22%	19%	23%	23%	21%	17%	18%
5.5-5.9	24%	25%	27%	22%	21%	20%	24%	23%	20%	18%
<5.5	19%	20%	12%	14%	16%	11%	9%	13%	12%	8%

Good Overall Fertility :
Soil pH > 6.2; Soil P and K Index 3 or 4

Optimum	17%
	83%

Good Overall Fertility -
Soil pH > 6.2; Soil P and K Index 3 or 4

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	13.1%	13.9%	15.9%	13.3%	12.0%	14.9%	15.3%	17.1%	17.3%	18.7%

Soil Analysis Status and Trends

Teagasc — AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

County	Kilkenny
Year	2016
Enterprise	Dairy
Number of Samples	1,321

Soil P Index
(Good Fertility - Index 3 & 4)

Index	%
Index 1	13%
Index 2	24%
Index 3	28%
Index 4	35%

Trend in Soil P Index

Legend: P Index 4, P Index 3, P Index 2, P Index 1

Year	P Index 4	P Index 3	P Index 2	P Index 1
2007	28%	27%	26%	19%
2008	33%	30%	23%	13%
2009	45%	21%	24%	10%
2010	20%	24%	31%	26%
2011	25%	27%	26%	22%
2012	20%	24%	32%	24%
2013	29%	27%	24%	20%
2014	27%	26%	30%	18%
2015	26%	23%	29%	22%
2016	35%	28%	24%	13%

Soil K Index
(Good Fertility - Index 3 & 4)

Index	%
Index 1	9%
Index 2	32%
Index 3	26%
Index 4	32%

Trend in Soil K Index

Legend: K Index 4, K Index 3, K Index 2, K Index 1

Year	K Index 4	K Index 3	K Index 2	K Index 1
2007	28%	28%	32%	11%
2008	33%	26%	31%	10%
2009	40%	23%	29%	8%
2010	22%	29%	41%	7%
2011	24%	25%	43%	8%
2012	23%	27%	39%	10%
2013	24%	28%	40%	9%
2014	30%	29%	32%	8%
2015	29%	26%	37%	8%
2016	32%	26%	32%	9%

Soil pH
(Good Fertility > pH6.2)

Range	%
<5.5	4%
5.5-5.9	17%
5.9-6.2	19%
6.2-6.5	24%
>6.5	36%

Trend in Soil pH

Legend: >6.5, 6.2-6.5, 5.9-6.2, 5.5-5.9, <5.5

Year	>6.5	6.2-6.5	5.9-6.2	5.5-5.9	<5.5
2007	11%	16%	23%	30%	21%
2008	19%	17%	22%	25%	17%
2009	12%	15%	17%	41%	15%
2010	11%	19%	26%	27%	17%
2011	20%	18%	20%	23%	19%
2012	26%	21%	24%	19%	9%
2013	22%	20%	24%	26%	9%
2014	20%	18%	22%	25%	15%
2015	26%	22%	18%	22%	12%
2016	36%	24%	19%	17%	4%

Good Overall Fertility :
Soil pH > 6.2; Soil P and K Index 3 or 4

	%
Optimum	18%
	82%

Good Overall Fertility -
Soil pH > 6.2; Soil P and K Index 3 or 4

Year	%
2007	10.4%
2008	15.2%
2009	14.5%
2010	8.5%
2011	11.5%
2012	13.4%
2013	14.9%
2014	15.5%
2015	17.9%
2016	22.1%

Soil Analysis Status and Trends

Teagasc — Agriculture and Food Development Authority

County	Kilkenny
Year	2016
Enterprise	Drystock
Number of Samples	1,141

Soil P Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
30%	31%	19%	20%

Trend in Soil P Index

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
P Index 4	27%	27%	28%	20%	23%	23%	30%	24%	21%	20%
P Index 3	25%	24%	28%	19%	28%	27%	19%	27%	24%	19%
P Index 2	28%	29%	32%	32%	27%	27%	29%	26%	27%	31%
P Index 1	20%	21%	12%	29%	22%	23%	22%	24%	28%	30%

Soil K Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
9%	35%	27%	29%

Trend in Soil K Index

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
K Index 4	33%	34%	27%	27%	20%	30%	27%	19%	28%	29%
K Index 3	24%	24%	31%	30%	27%	24%	27%	28%	26%	27%
K Index 2	33%	34%	35%	37%	42%	36%	38%	41%	35%	35%
K Index 1	10%	9%	7%	6%	11%	10%	8%	12%	11%	9%

Soil pH
(Good Fertility > pH6.2)

<5.5	5.5-5.9	5.9-6.2	6.2-6.5	>6.5
14%	24%	19%	14%	28%

Trend in Soil pH

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
>6.5	14%	14%	19%	14%	17%	21%	25%	22%	26%	28%
6.2-6.5	17%	12%	18%	19%	20%	20%	19%	18%	18%	14%
5.9-6.2	21%	19%	23%	23%	22%	23%	23%	23%	18%	19%
5.5-5.9	24%	29%	26%	24%	26%	22%	23%	23%	23%	24%
<5.5	23%	26%	14%	20%	16%	15%	9%	14%	15%	14%

Good Overall Fertility :
Soil pH > 6.2; Soil P and K Index 3 or 4

Optimum	14%
	86%

Good Overall Fertility -
Soil pH > 6.2; Soil P and K Index 3 or 4

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
12.6%	10.9%	15.9%	10.1%	10.2%	14.8%	14.5%	13.9%	14.4%	13.5%

Soil Analysis Status and Trends

Teagasc — Agriculture and Food Development Authority

County	Kilkenny
Year	2016
Enterprise	Tillage
Number of Samples	351

Soil P Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
15%	34%	25%	26%

Trend in Soil P Index

Legend: P Index 4, P Index 3, P Index 2, P Index 1

Soil K Index
(Good Fertility - Index 3 & 4)

Index 1	Index 2	Index 3	Index 4
13%	40%	30%	17%

Trend in Soil K Index

Legend: K Index 4, K Index 3, K Index 2, K Index 1

Soil pH
(Good Fertility > pH6.2)

<5.5	5.5-5.9	5.9-6.2	6.2-6.5	>6.5
1%	8%	10%	19%	62%

Trend in Soil pH

Legend: >6.5, 6.2-6.5, 5.9-6.2, 5.5-5.9, <5.5

Good Overall Fertility :
Soil pH > 6.2; Soil P and K Index 3 or 4

Optimum 20%
80%

Good Overall Fertility -
Soil pH > 6.2; Soil P and K Index 3 or 4

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
11.4%	12.8%	10.4%	15.8%	13.2%	16.2%	13.5%	24.4%	19.9%	16.6%