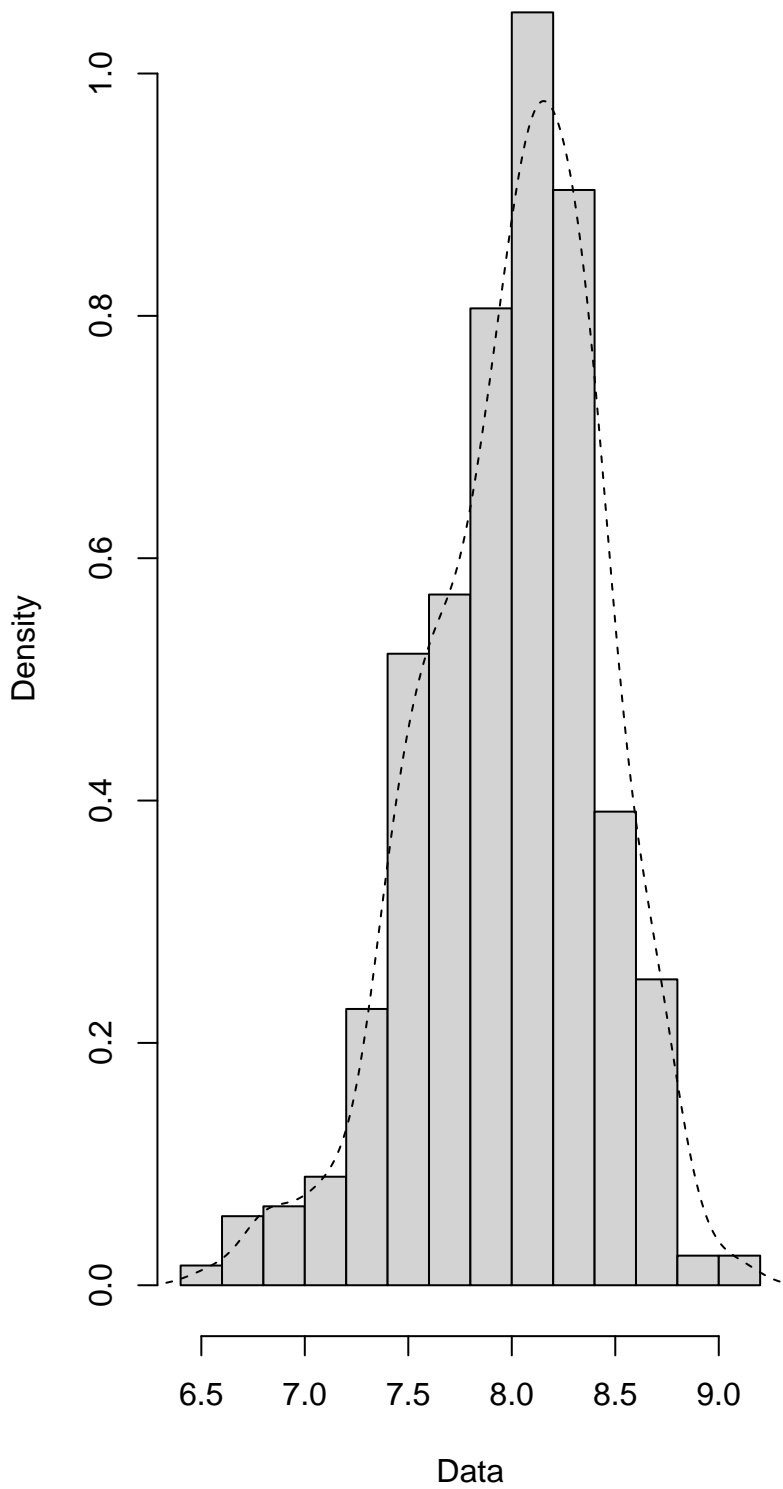


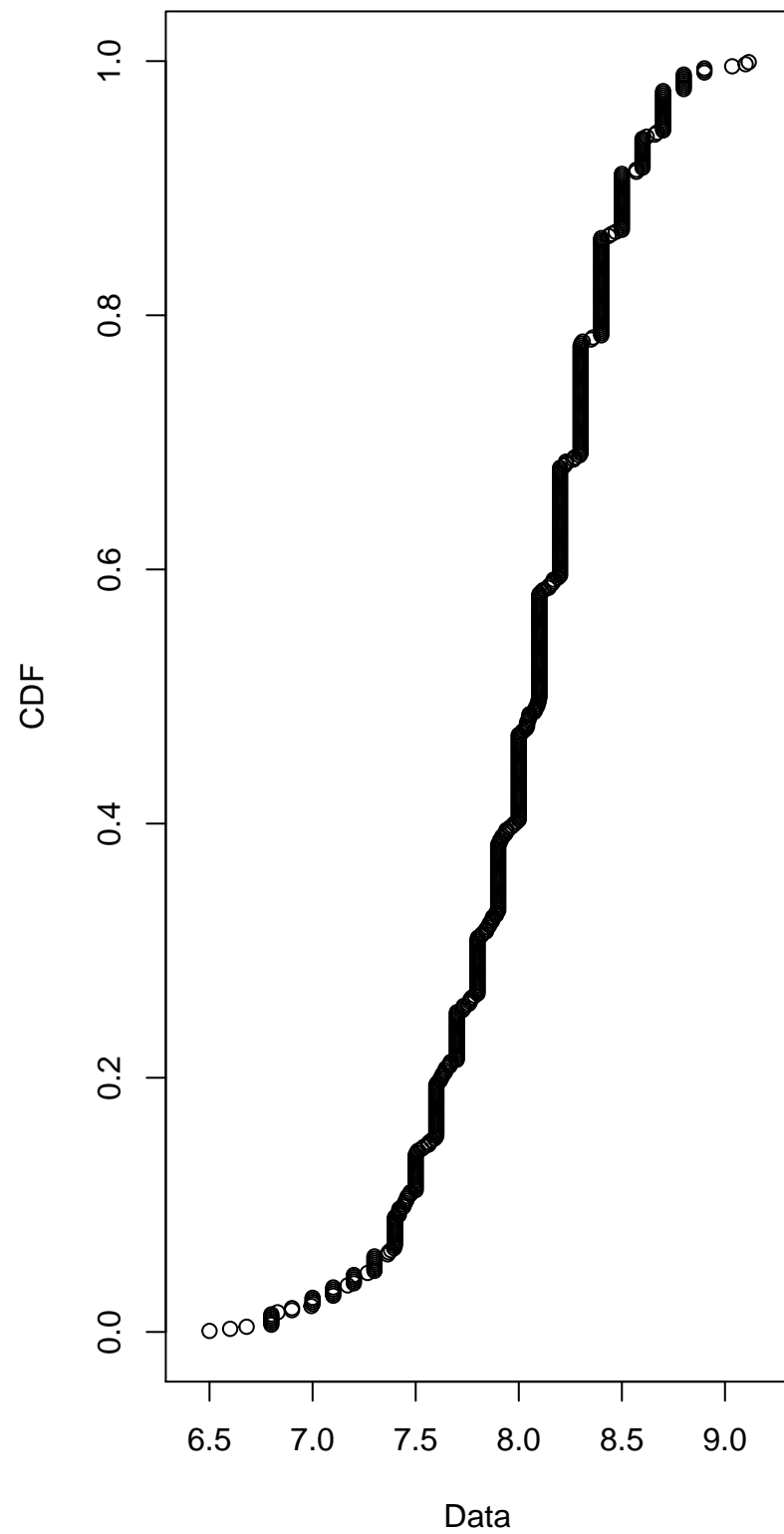
# Summary of the variable

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
6.500	7.700	8.100	8.014	8.300	9.115	1

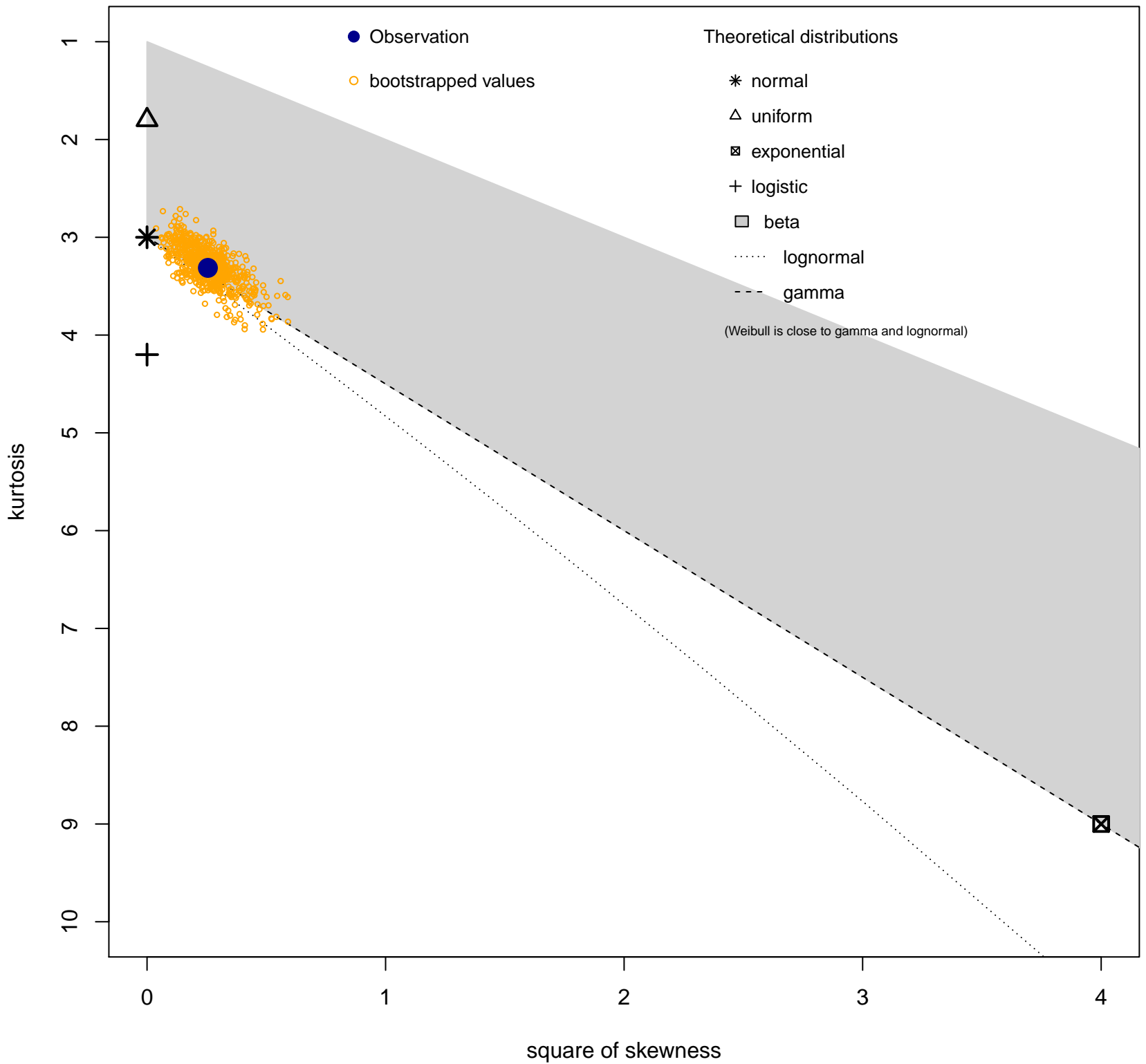
**Empirical density**



**Cumulative distribution**



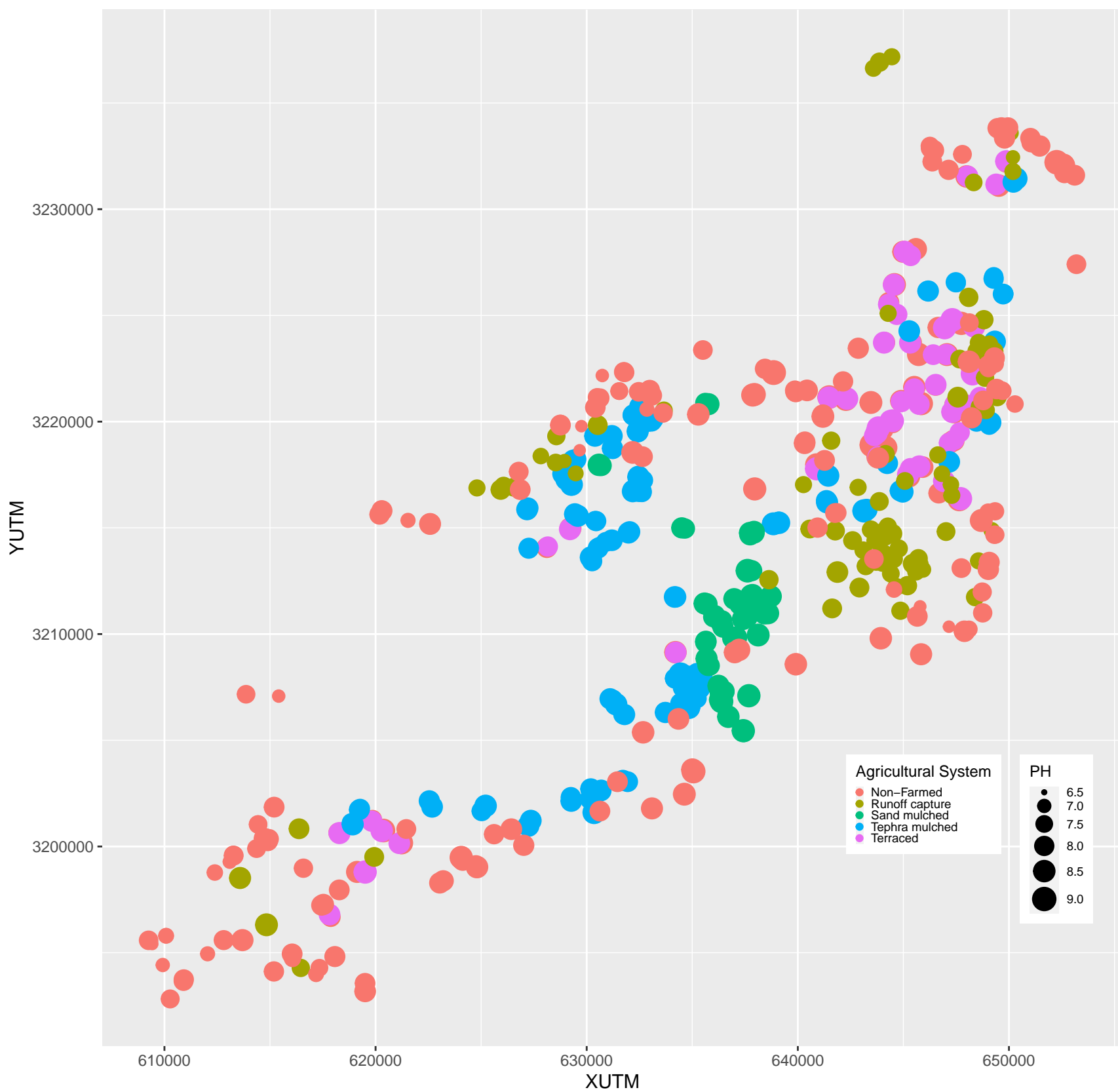
# Cullen and Frey graph



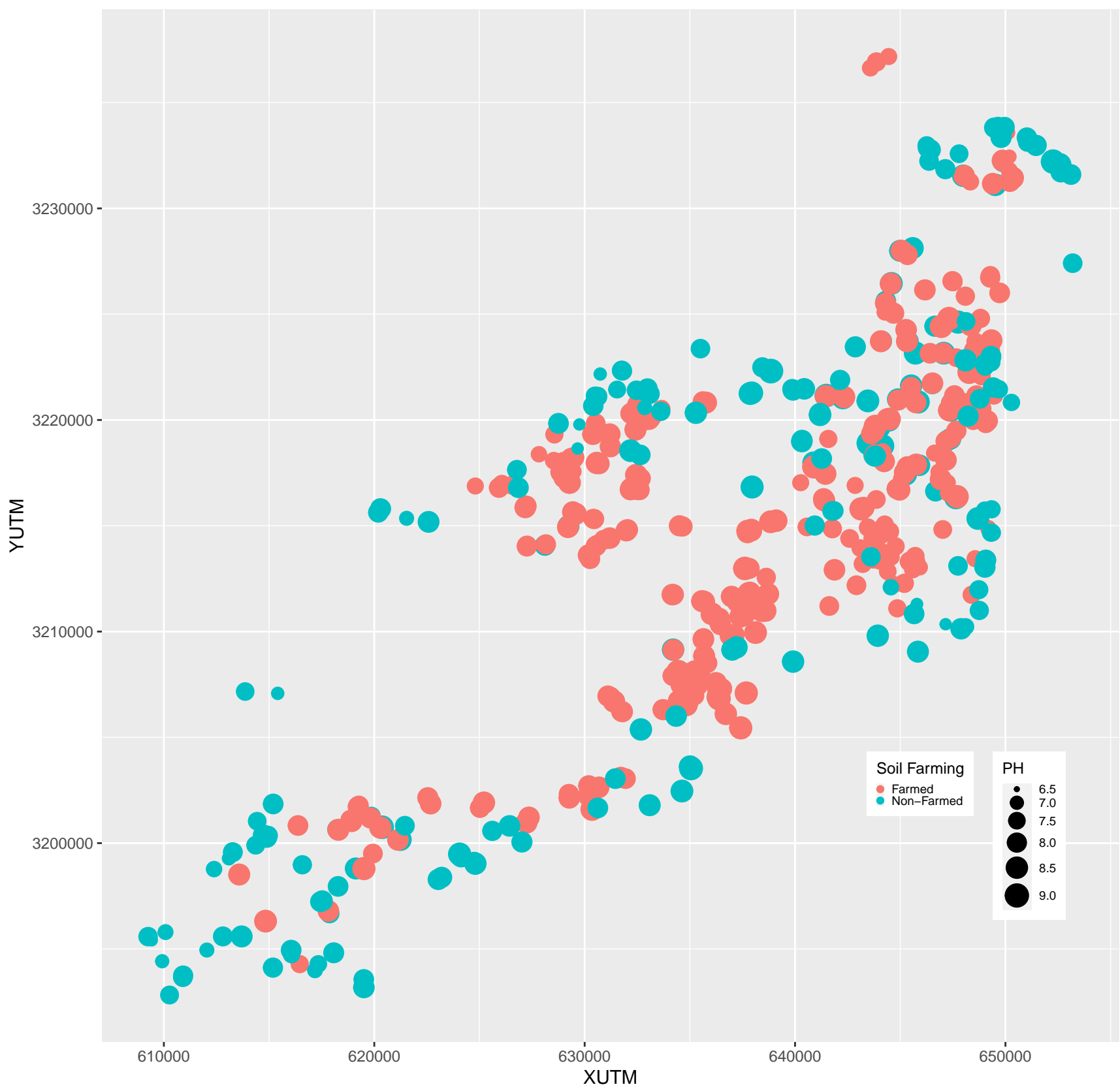
# Shapiro–Wilk test for normality

Shapiro–Wilk normality test
data: dataframe[, variable_chr]
W = 0.98041, p-value = 2.528e-07

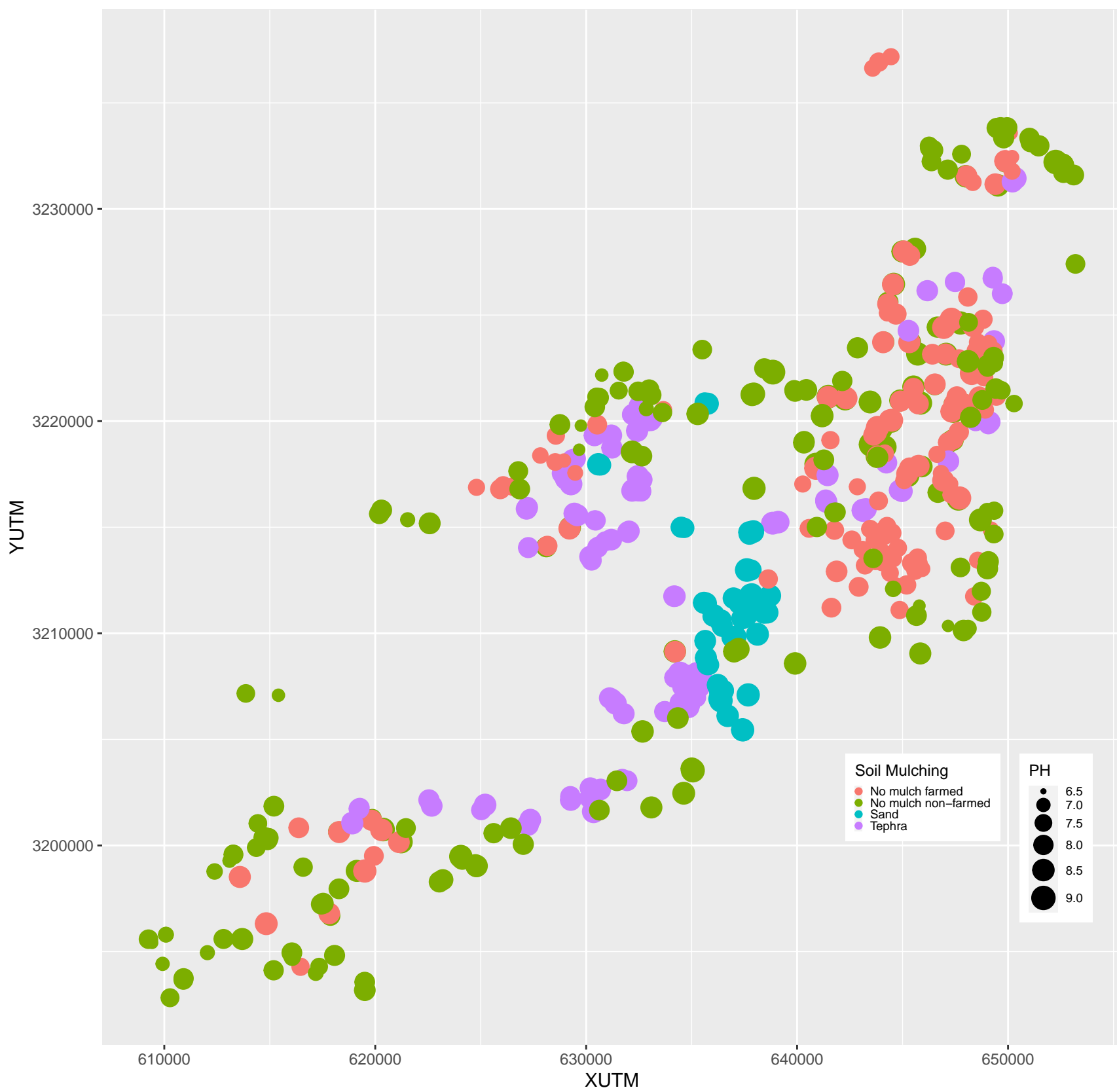
PH according to location and Agricultural System



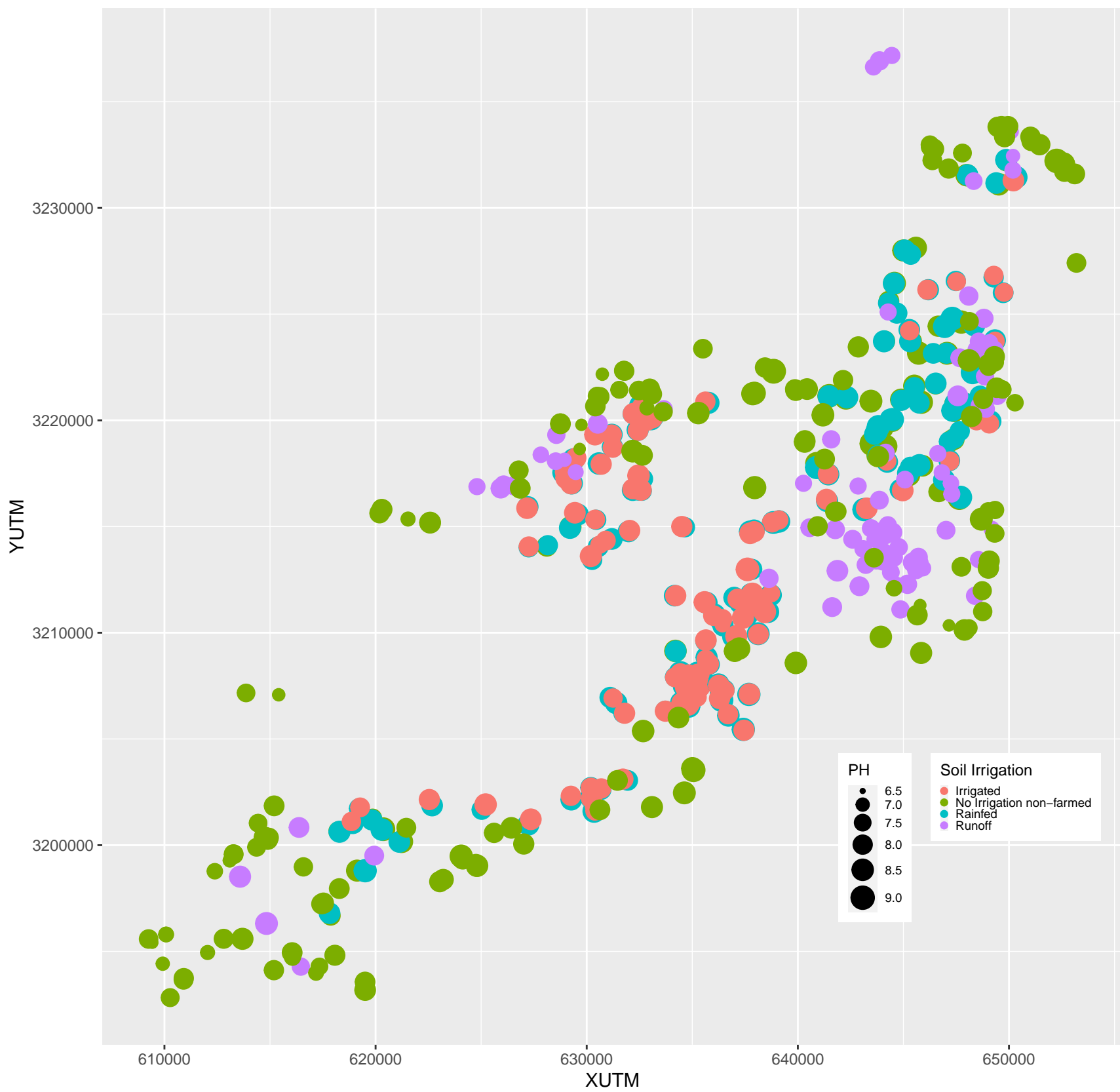
PH according to location and Soil Farming



PH according to location and Soil Mulching

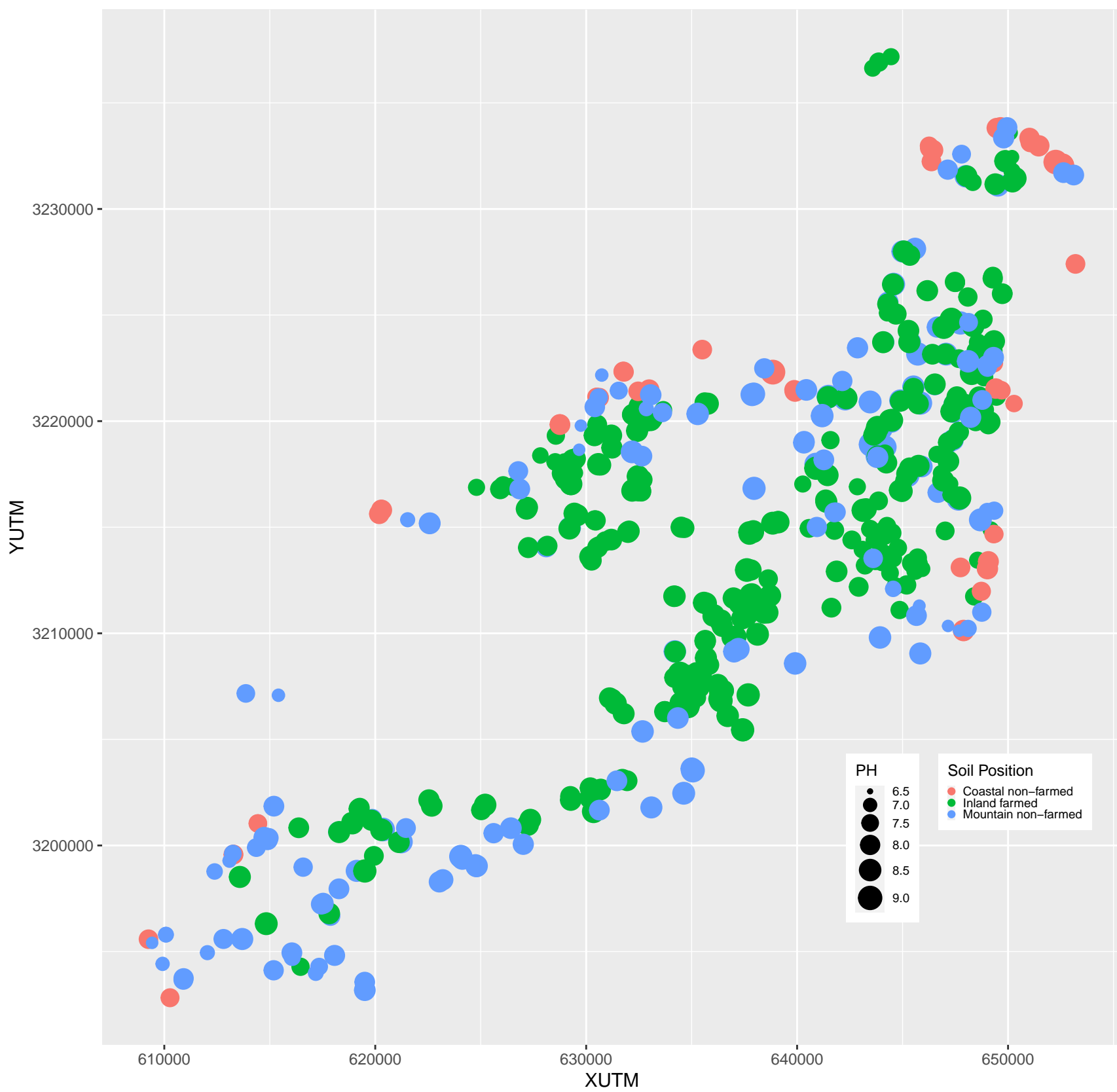


PH according to location and Soil Irrigation

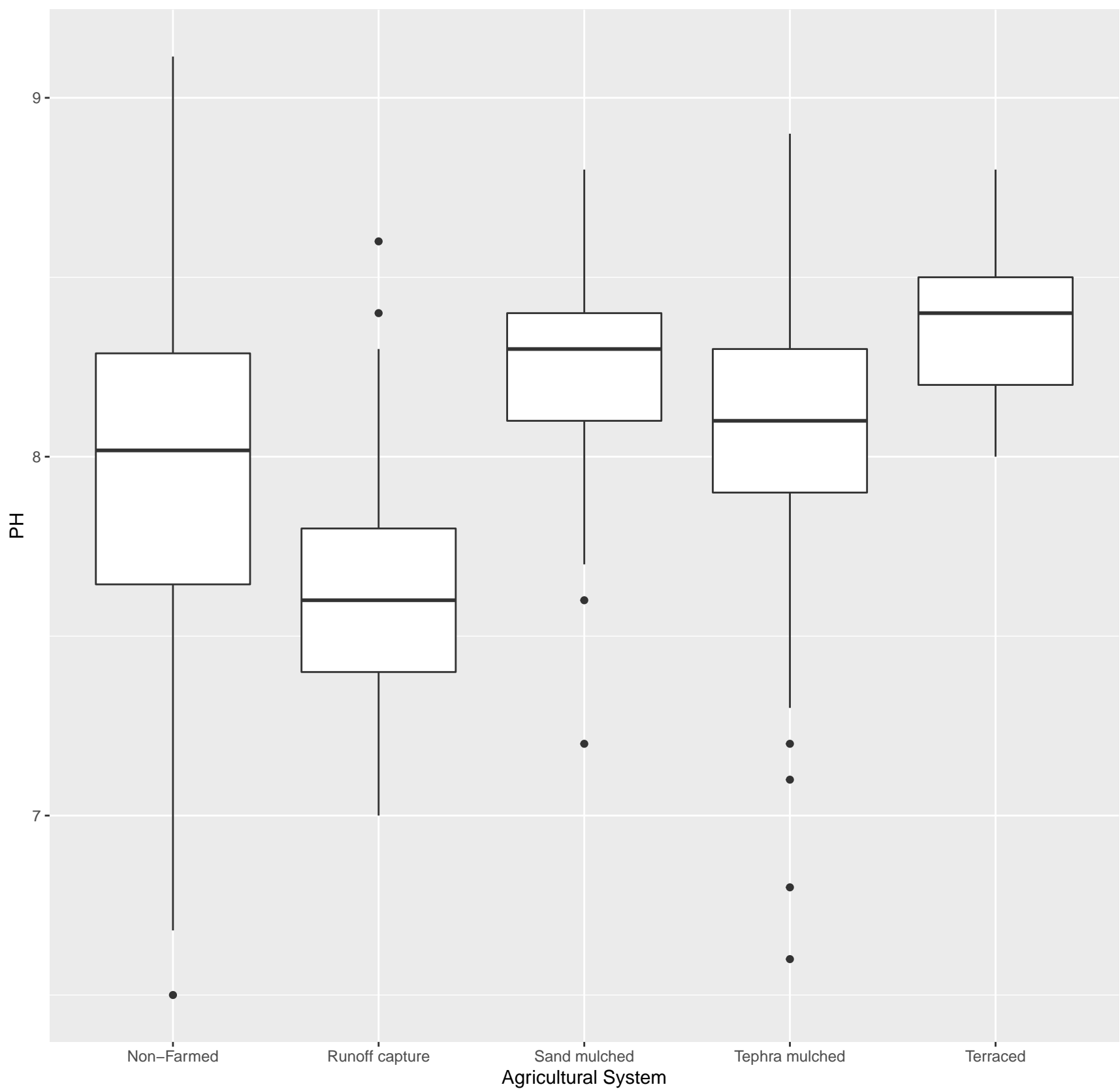




PH according to location and Soil Position



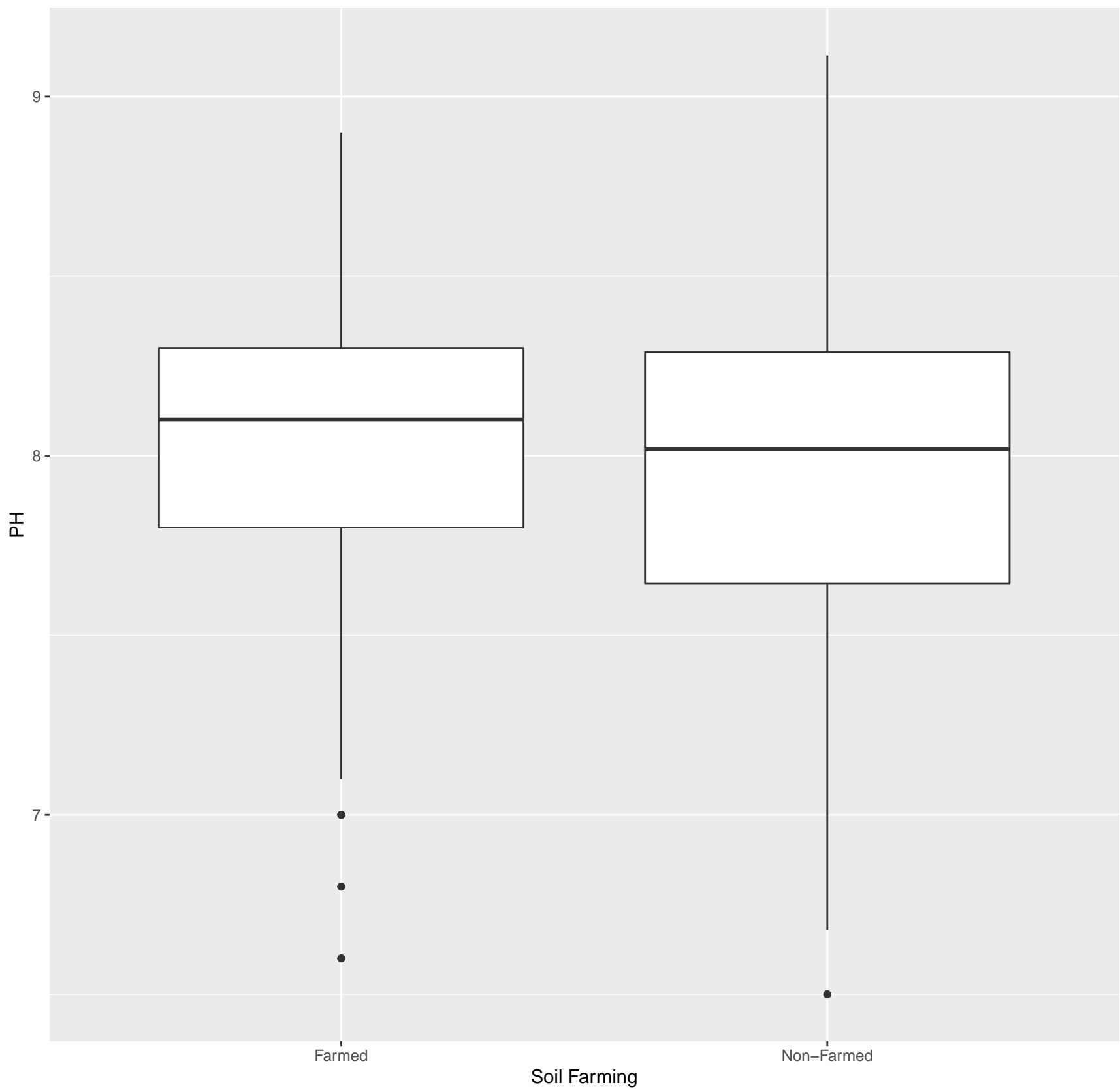
PH to Agricultural System



# Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	PH	Non-Farmed	Runoff capture	262	82	16077.0	1.11e-11	7.77e-11	****
2	PH	Non-Farmed	Sand mulched	262	60	4587.5	4.78e-07	1.91e-06	****
3	PH	Non-Farmed	Tephra mulched	262	160	17330.0	3.00e-03	6.00e-03	**
4	PH	Non-Farmed	Terraced	262	50	2972.0	9.03e-10	5.42e-09	****
5	PH	Runoff capture	Sand mulched	82	60	308.5	5.06e-19	4.05e-18	****
6	PH	Runoff capture	Tephra mulched	82	160	1568.0	2.58e-22	2.58e-21	****
7	PH	Runoff capture	Terraced	82	50	113.0	8.03e-20	7.23e-19	****
8	PH	Sand mulched	Tephra mulched	60	160	6367.0	1.77e-04	5.31e-04	***
9	PH	Sand mulched	Terraced	60	50	1204.0	7.30e-02	7.30e-02	ns
10	PH	Tephra mulched	Terraced	160	50	2004.5	8.78e-08	4.39e-07	****

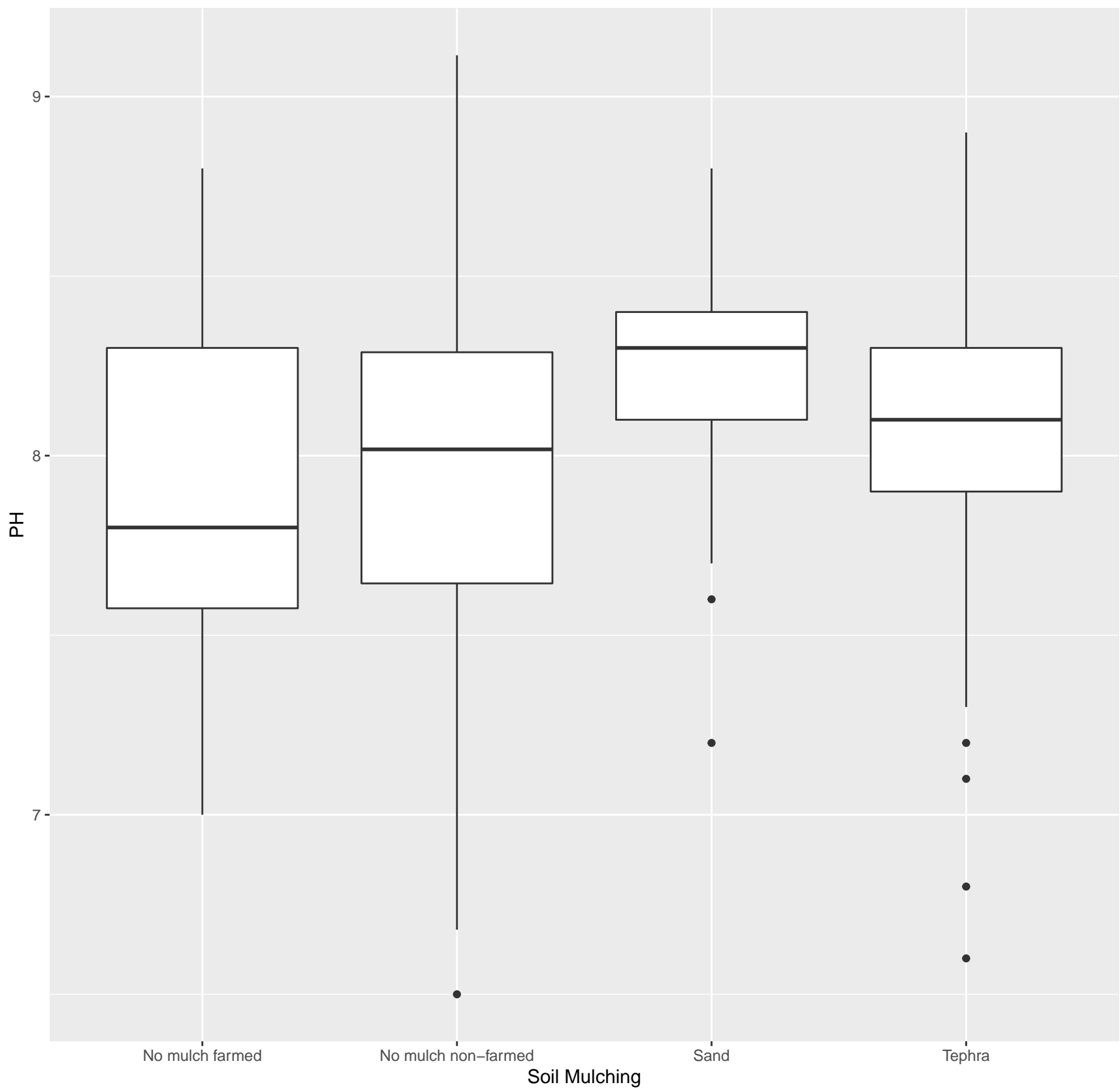
PH to Soil Farming



# Wilcoxon test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p
1	PH	Farmed	Non-Farmed	352	262	51257.5	0.0178

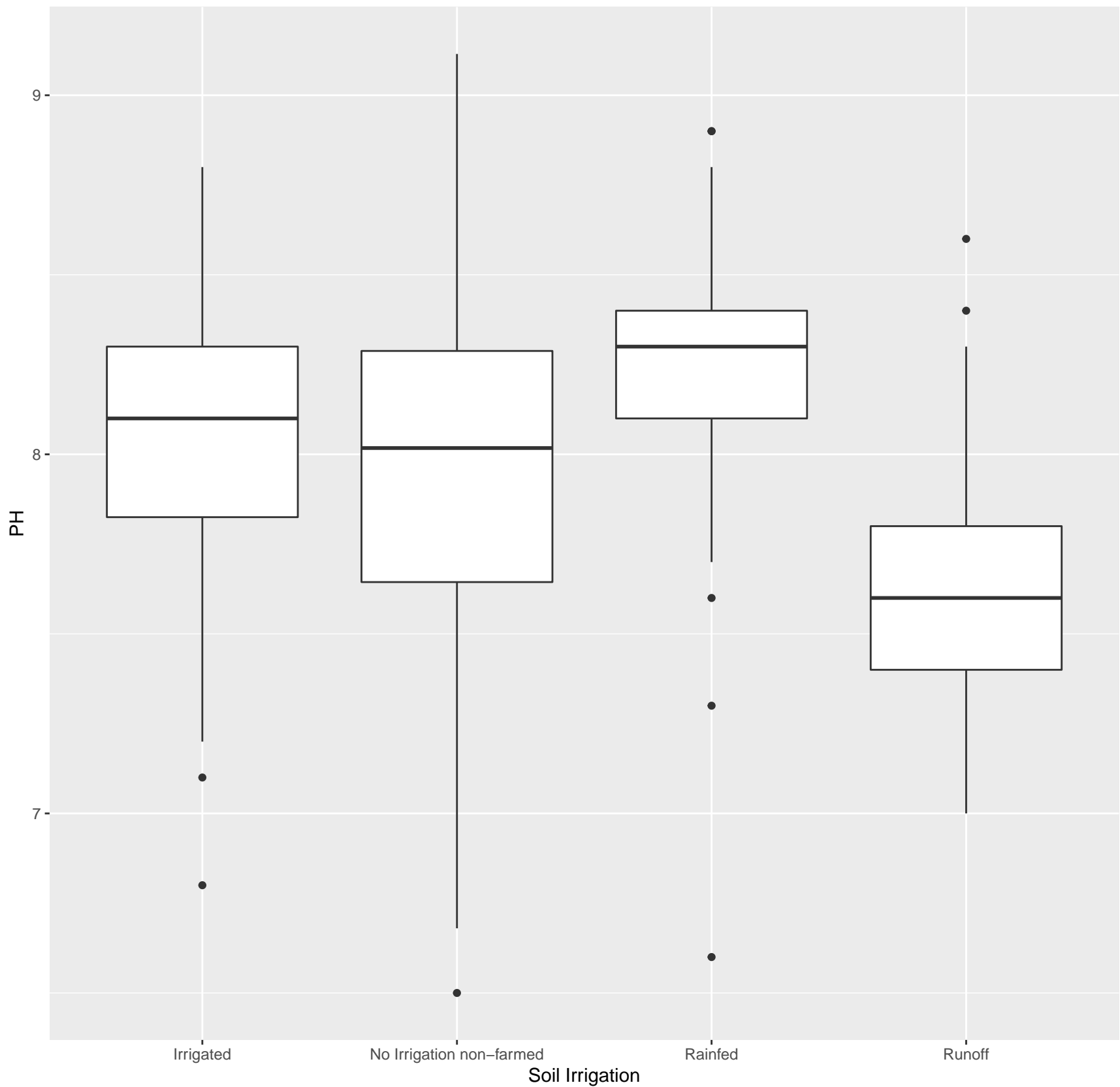
PH to Soil Mulching



# Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	PH	No mulch farmed	No mulch non-farmed	132	262	15535.0	1.00e-01	1.00e-01	ns
2	PH	No mulch farmed	Sand	132	60	2104.5	1.84e-07	1.10e-06	****
3	PH	No mulch farmed	Tephra	132	160	7563.5	2.85e-05	1.14e-04	***
4	PH	No mulch non-farmed	Sand	262	60	4587.5	4.78e-07	2.39e-06	****
5	PH	No mulch non-farmed	Tephra	262	160	17330.0	3.00e-03	6.00e-03	**
6	PH	Sand	Tephra	60	160	6367.0	1.77e-04	5.31e-04	***

PH to Soil Irrigation

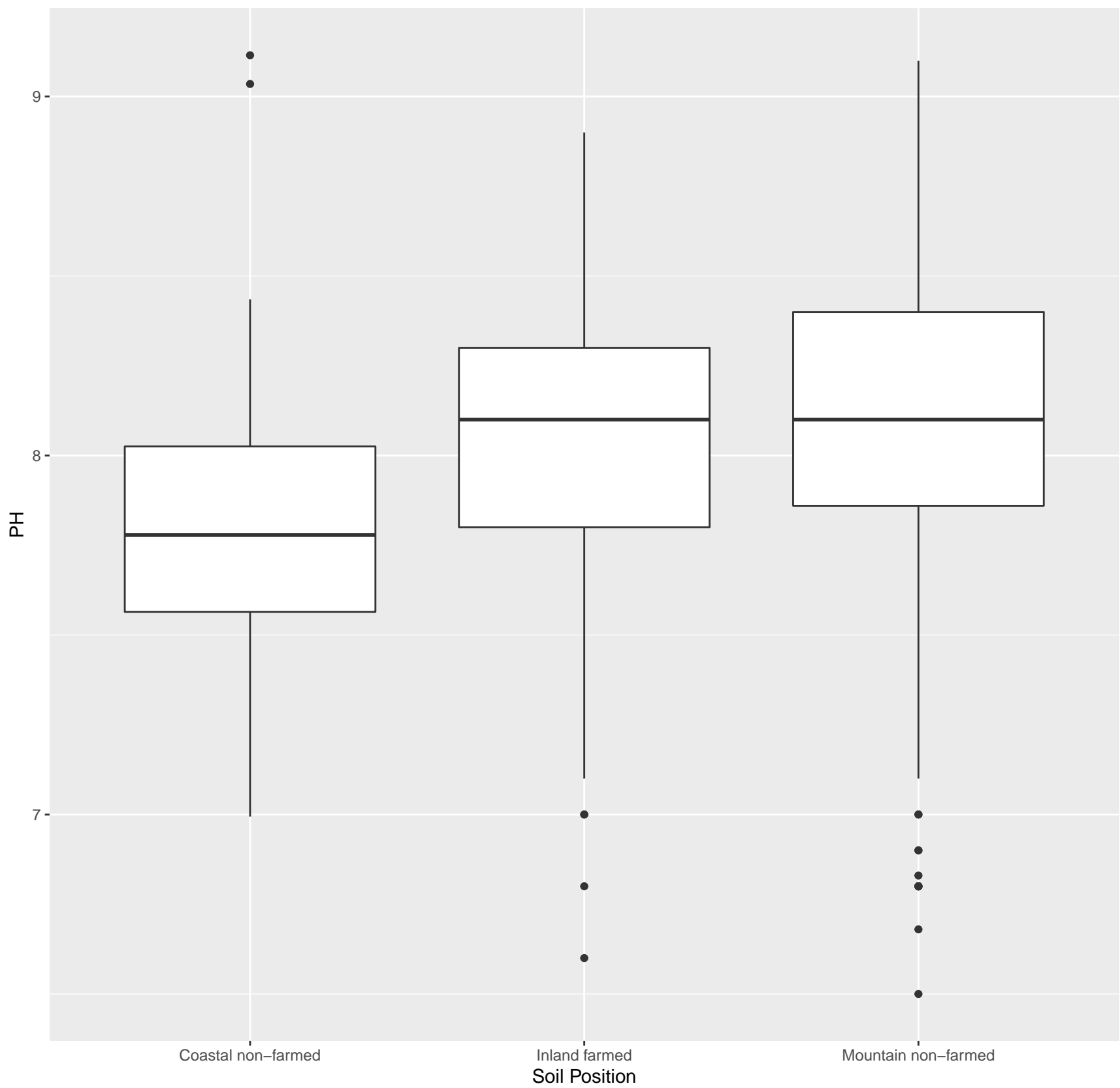




# Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	PH	Irrigated	No Irrigation non-farmed	110	262	15743.0	1.59e-01	1.59e-01	ns
2	PH	Irrigated	Rainfed	110	160	4751.5	1.03e-10	2.06e-10	****
3	PH	Irrigated	Runoff	110	82	7729.5	2.24e-17	1.12e-16	****
4	PH	No Irrigation non-farmed	Rainfed	262	160	11812.5	4.77e-14	1.91e-13	****
5	PH	No Irrigation non-farmed	Runoff	262	82	16077.0	1.11e-11	3.33e-11	****
6	PH	Rainfed	Runoff	160	82	12421.0	3.76e-30	2.26e-29	****

PH to Soil Position



# Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	PH	Coastal non-farmed	Inland farmed	92	352	9428.0	6.29e-10	1.89e-09	****
2	PH	Coastal non-farmed	Mountain non-farmed	92	170	4492.0	1.30e-08	2.60e-08	****
3	PH	Inland farmed	Mountain non-farmed	352	170	28301.5	3.15e-01	3.15e-01	ns