NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE SPECIFICATION

DEEP TILLAGE

(Acre)

CODE 324

The following tables and references contain the accepted crop tolerance values to be used to adjust soil pH using deep tillage. Use of other values requires approval by the State Resource Conservationist or the State Agronomist.

References to be used to determine acceptable pH levels for crops

Field Crop Fertilizer Recommendations For Alaska – SOIL FERTILITY BASICS

J.L. Walworth, 1992. University of Alaska Cooperative Extension Service Publication 100G-00242A

Field Crop Fertilizer Recommendations For Alaska - FORAGE CROPS

M. T. Panciera and R. G. Gavlak, 1993. University of Alaska Cooperative Extension Service Publication 100G-00149A

Field Crop Fertilizer Recommendations For Alaska - POTATOES

J. L. Walworth, 1993. University of Alaska Cooperative Extension Service Publication 100G-00246A

Field Crop Fertilizer Recommendations For Alaska - VEGETABLES

J. L. Walworth, 1995. University of Alaska Cooperative Extension Service Publication 100G-00643A

Table 1. **Optimum Crop Soil pH Ranges**

	Optimum pH range[1]
alfalfa	6.5 - 8.0
apples	4.8 - 6.5
apricots	4.8 - 6.5
barley	6.5 - 8.0
beets	5.8 - 8.0
blackberries	5.7 - 6.5
blueberries	4.0 - 4.8
broccoli	6.0 - 7.5
brussels sprouts	6.0 - 7.5
cabbage	5.8 - 8.0
carrots	5.3 - 6.8
cauliflower	5.8 - 7.0
celery	5.8 - 7.0
cherries	4.8 - 6.5
chinese cabbage	6.9 - 7.5
chives	5.8 - 7.0
clover,	
alsike	5.5 - 7.5
red	6.0 - 7.5
white	6.0 - 7.5
cucumbers	5.3 - 6.8
currants	5.8 - 8.0
gooseberries	5.8 - 8.0
horseradish	5.8 - 7.0
kentucky bluegrass	5.5 - 8.0
lettuce	5.8 - 7.0
lupine	5.5 - 7.0
oats	5.5 - 7.0
parsnips	5.3 - 6.8
peas	5.8 - 6.8
peppers	5.3 - 6.8
potatoes	4.9 - 6.2[2]
pumpkins	5.3 - 7.5
quackgrass	5.5 - 6.5
radishes	5.8 - 7.0
rape	6.0 - 7.5
raspberries	5.7 - 6.5
red fescue	5.5 - 6.5
reed canary grass	6.0 - 7.0
rhubarb	5.8 - 7.0
rutabagas	5.3 - 6.8
rye	5.0 - 7.0
snap beans	5.3 - 6.8
spinach	5.8 - 7.5
strawberries	4.8 - 6.5
squash	5.3 - 7.5
timothy	5.5 - 7.5
tomatoes	5.3 - 7.5
turnips	6.0 - 7.0
wheat	6.0 - 8.0
vetch	5.5 - 7.0

[1] These ranges are estimates only; they are for mineral soils (not mucks or peats).

[2] Potatoes grown at the upper end of this range may be more susceptible to potato scab than those grown at lower pHs.

Source: Walworth, J. L. 1992. *Soil Fertility Basics*. University of Alaska, Cooperative Extension Service Publication100G-00242A.

REFERENCES:

Field Crop Fertilizer Recommendations For Alaska - CEREAL GRAINS.
G. A. Mitchell, 1992. University of Alaska Cooperative Extension Service Publication 100G-00442

Field Crop Fertilizer Recommendations For Alaska - FERTILIZER NUTRIENT SOURCES AND LIME.
Gavlak, R. G., 1992. University of Alaska Cooperative Extension Service Publication 100G-00348

Field Crop Fertilizer Recommendations For Alaska - FORAGE CROPS.
M. T. Panciera and R. G. Gavlak, 1993. University of Alaska Cooperative Extension Service Publication 100G-00149A

Field Crop Fertilizer Recommendations For Alaska - POTATOES.
J. L. Walworth, 1993. University of Alaska Cooperative Extension Service Publication 100G-00246A

Field Crop Fertilizer Recommendations For Alaska - VEGETABLES.
J. L. Walworth, 1995. University of Alaska Cooperative Extension Service Publication 100G-00643A

Lime Requirement Indices of Alaskan Soils.
Loynachan, T. E. 1979, University of Alaska Agricultural Experiment Station Bulletin 52.

Soil Fertility Basics.
Walworth, J. L. 1992, University of Alaska Cooperative Extension Service Publication 100G-00242A

Soil Sampling and Analysis.
Walworth, J. L. 1992, University of Alaska Cooperative Extension Service Publication 100G-00044G