



Liming Oahu Soils

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- Know your soil pH
- Understand optimum pH level for you targeted crop
- Understand soil type and use appropriate liming curve
- Use generalized curve if you don't know your soil type

- EXAMPLE-Generalized

- Locate appropriate liming materials

- Calcitic limestones (CaCO_3)
- Quicklime calcium oxide (CaO)
- Hydrated lime calcium hydroxide ($\text{Ca}(\text{OH})_2$)
- Dolomitic lime calcium-magnesium carbonate
- Slag calcium silicate (CaSiO_3)

- Understand the neutralizing power of each product

- EXAMPLE: Neutralizing power of 82%

- Calculate how much lime will be needed to raise your pH

- EXAMPLE:

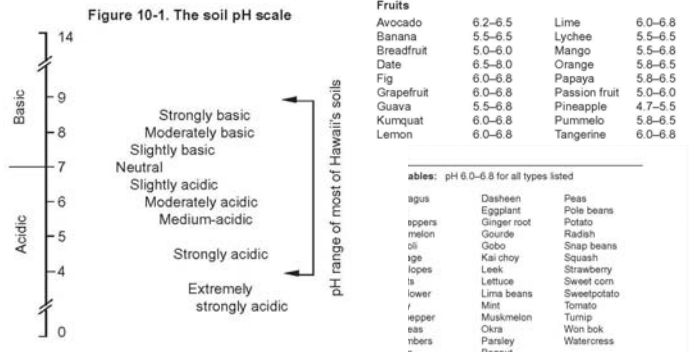
- Original pH 4.8
- Desired pH: 6.5
- Liming curve: 4 tons / acre (8,000 pounds /acre)
- Neutralizing power: 82%
- Total to be applied to raise pH from 4.8 to 6.5:

- 9,756 pounds / acre

- Evaluate cost of the products

- Land lease
- Longevity of the crop
- Etc.

Figure 10-1. The soil pH scale



Test Results and Interpretation		INTERPRETATION					
Soil Analysis	Results	Expected	Very Low	Low	Sufficient	High	Very High
HEAVY SOIL							
pH	4.8	6	[Bar chart showing interpretation levels]				
P_ppm	26	37.5					
K_ppm	406	250					
Ca_ppm	277	1750					
Mg_ppm	198	350					
OC_%		No criteria found					
Total N_%		No criteria found					
Salinity_EC	0.2	1.25					
S_ppm		No criteria found					
Fe_ppm		No criteria found					
Mn_ppm		No criteria found					
Zn_ppm		No criteria found					
Cu_ppm		No criteria found					
B_ppm		No criteria found					
Mo_ppm		No criteria found					
Al_ppm		No criteria found					

