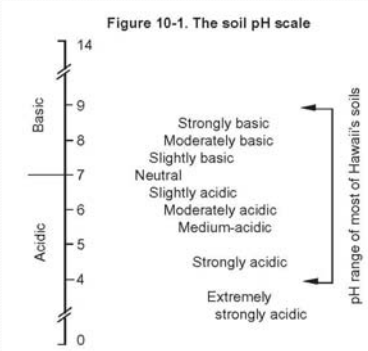
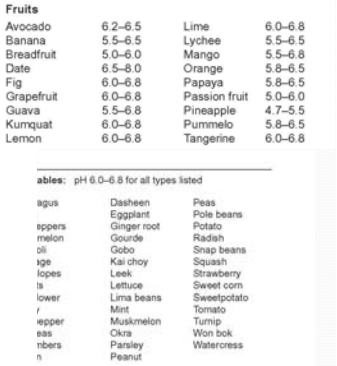
Liming Oahu Soils

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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 ($Ca(OH)_2$)
  - 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.

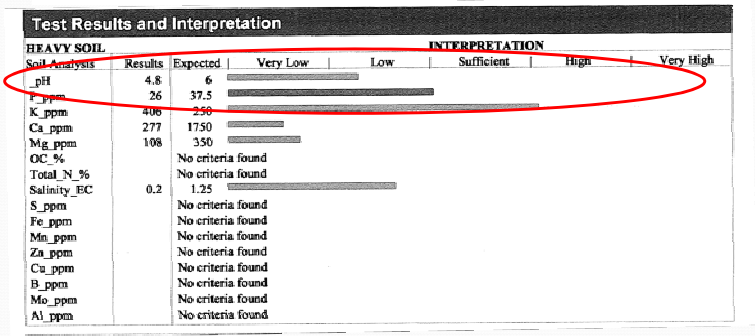




Fruits			
Avocado	6.2–6.5	Lime	6.0–6.8
Banana	5.5–6.5	Lychee	5.5–6.5
Breadfruit	5.0–6.0	Mango	5.5–6.8
Date	6.5–8.0	Orange	5.8–6.5
Fig	6.0–6.8	Papaya	5.8–6.5
Grapefruit	6.0–6.8	Passion fruit	5.0–6.0
Guava	5.5–6.8	Pineapple	4.7–5.5
Kumquat	6.0–6.8	Pummelo	5.8–6.5
Lemon	6.0–6.8	Tangerine	6.0–6.8

ables: pH 6.0–6.8 for all types listed

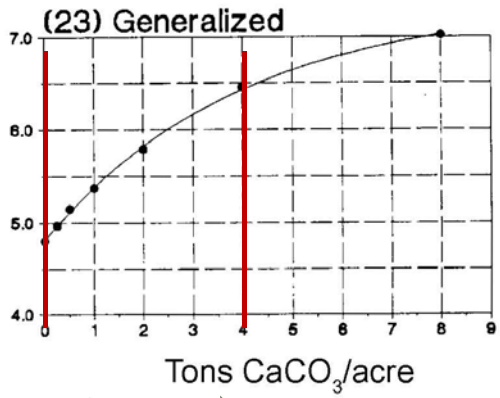
agus	Dasheen	Peas
	Eggplant	Pole beans
ppers	Ginger root	Potato
melon	Gourde	Radish
oli	Gobo	Snap beans
ige	Kai choy	Squash
lopes	Leek	Strawberry
ts	Lettuce	Sweet corn
lower	Lima beans	Sweetpotato
/	Mint	Tomato
epper	Muskmelon	Turnip
eas	Okra	Won bok
nbers	Parsley	Watercress
n	Peanut	



Test Results and Interpretation

HEAVY SOIL			INTERPRETATION				
Soil Analysis	Results	Expected	Very Low	Low	Sufficient	High	Very High
_pH	4.8	6					
P_ppm	26	37.5					
K_ppm	406	250					
Ca_ppm	277	1750					
Mg_ppm	108	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					





From: *Plant Nutrient Management in Hawaii's Soils, Approaches for Tropical and Subtropical Agriculture*
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