



USING AGRICULTURAL LIME

Grower's Manual



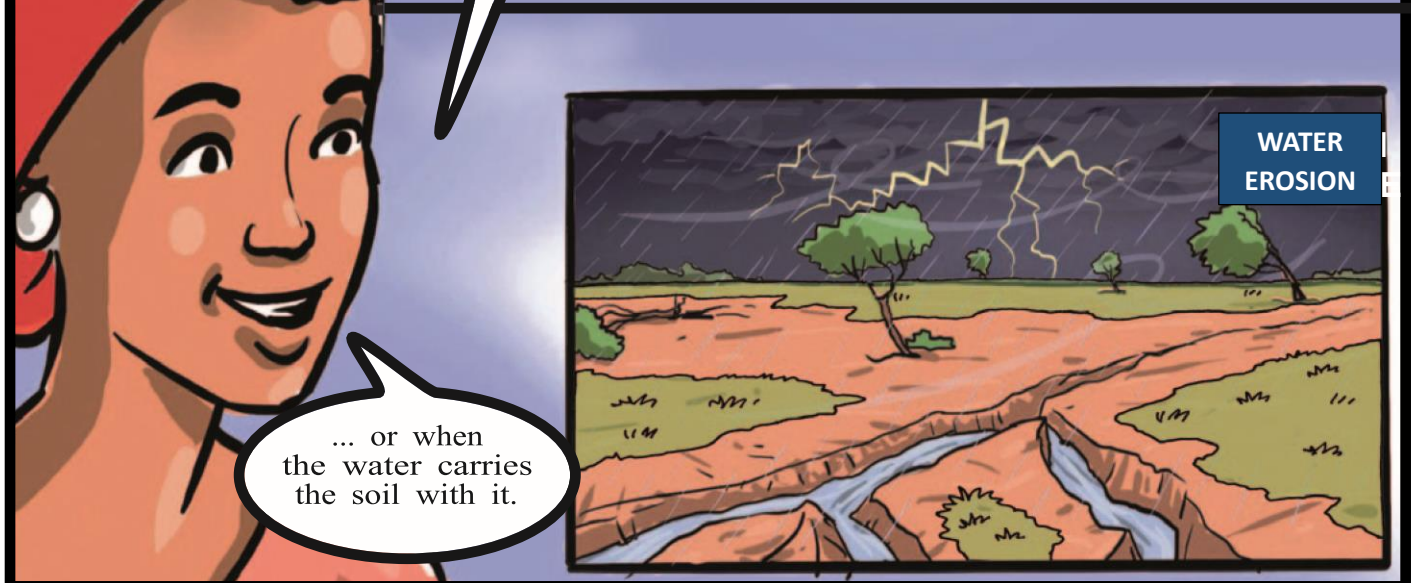
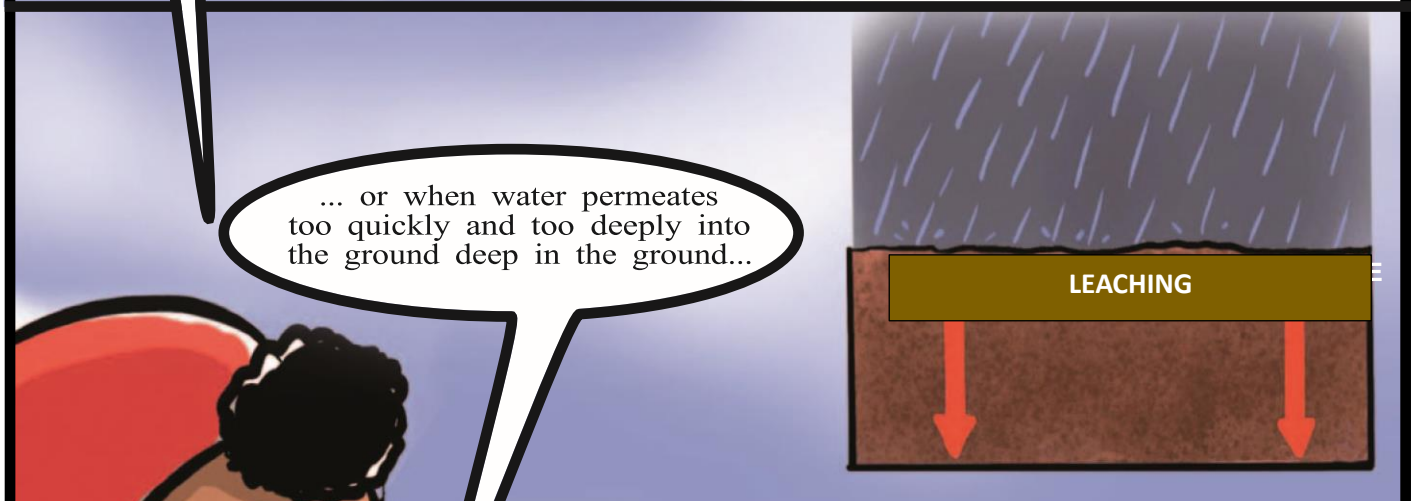
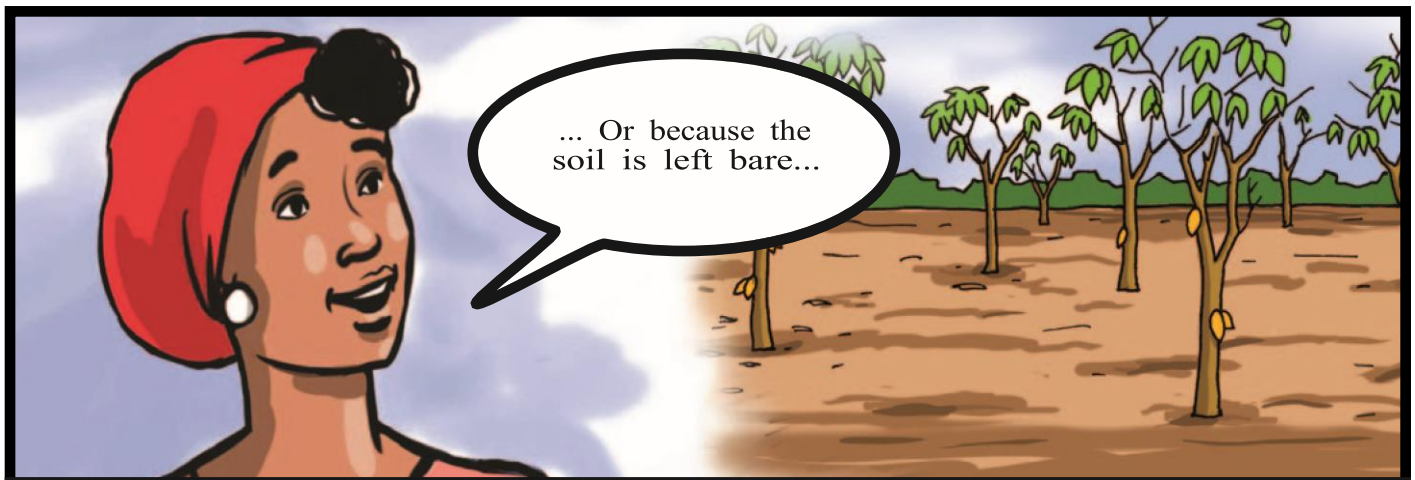
2023 – Version 1

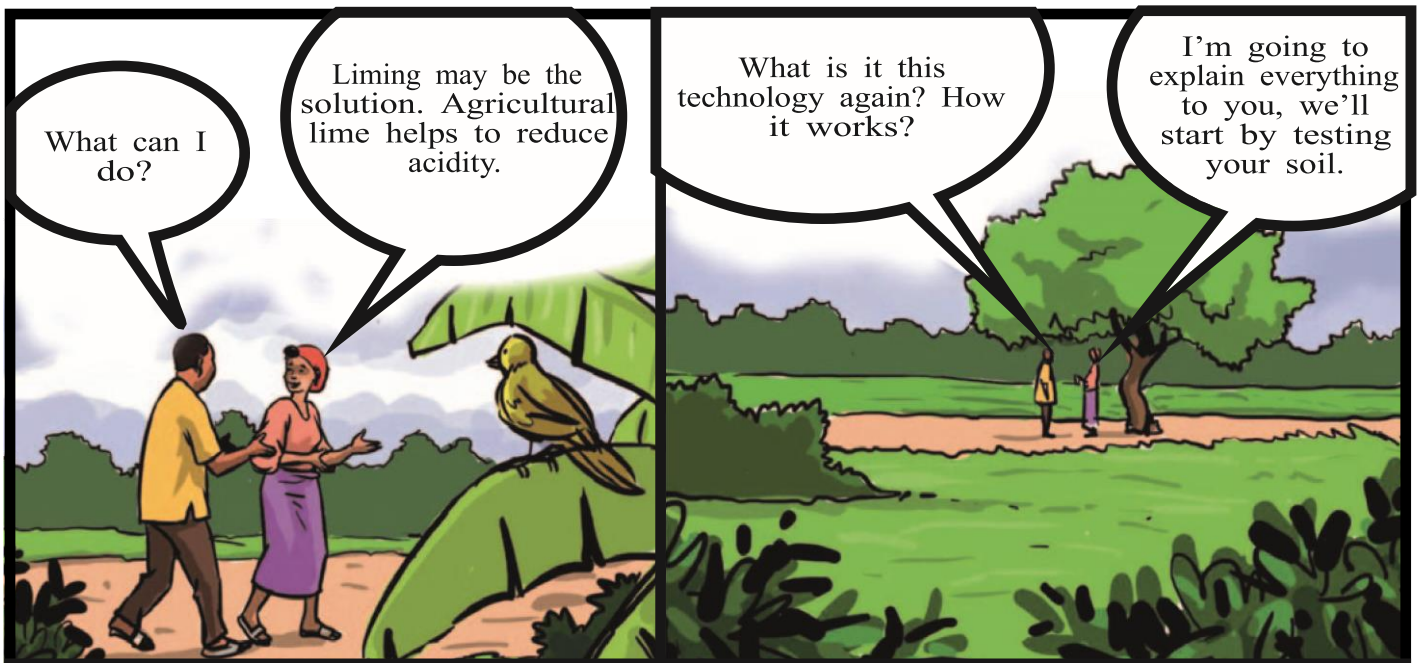
RESTORATION OF ACIDIC AGRICULTURAL SOILS: FROM OBSERVATION TO ACTION

Hawa is a grower. She has already participated in liming tests on her seed potato crops. Today, she is on Abraham's land, a grower friend who has been dealing, for several years, with a drop in yields of his own crops...

WHY LIME MY SOIL?







HOW TO TEST MY SOIL?



You take handfuls of soil from 0 to 10 cm maximum depth in several areas of the plot, where the soil is good, average, and bad.
You then remove the small stones and twigs.



You place the samples separately in very clean containers. For example, the bottom part of water bottles. Do not use metal containers.



You take water from a river, a well, or a jar and pour it into a clean container. You must not take dirty, stagnant water or from the tap.



Acidification can be natural or caused by a lack of good tillage, a poor management of fertility...



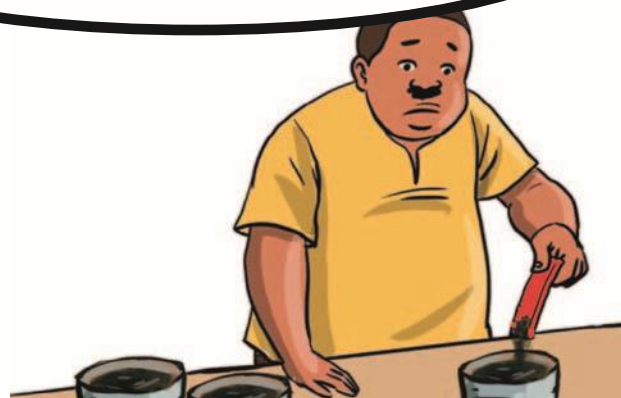
The water must be neutral, i.e. have a pH close to 7. If it is the case, you can use it to test the soil. Otherwise, you need to change the water.



Pour the water into the containers, just enough to cover the samples. Stir well with a stick (not a metal object) and let it sit for one to two minutes.



Then you dip the strip in the soil solution for 5 to 10 seconds. You take out the strip, you shake it. You compare its color with the colored scale.



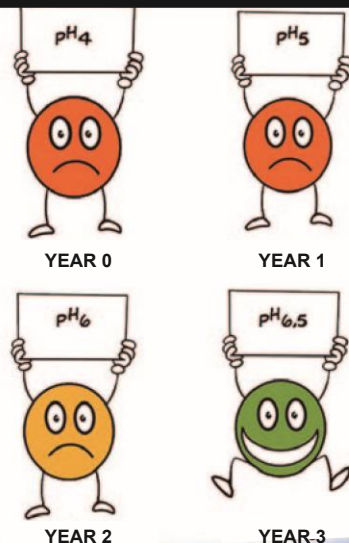
If the color of the strip goes from 0 to 7 (yellow, orange, red), your soil is acidic. The more red the color, the more acidic your soil is. If the color goes from 7 to 14, it is not acidic!



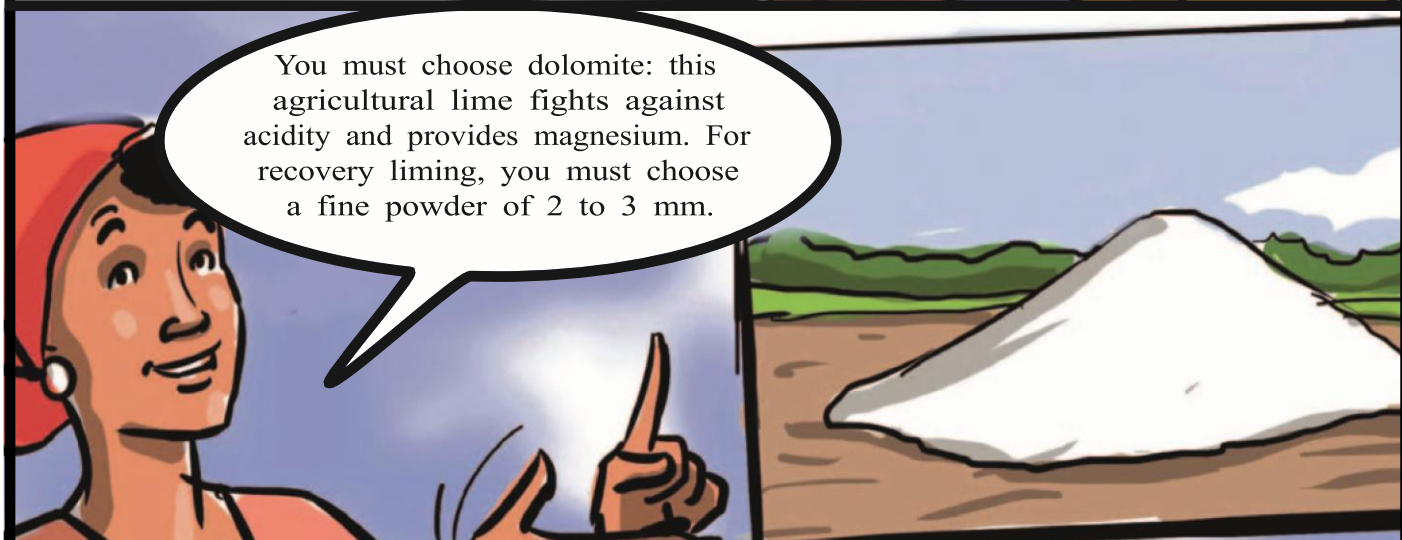
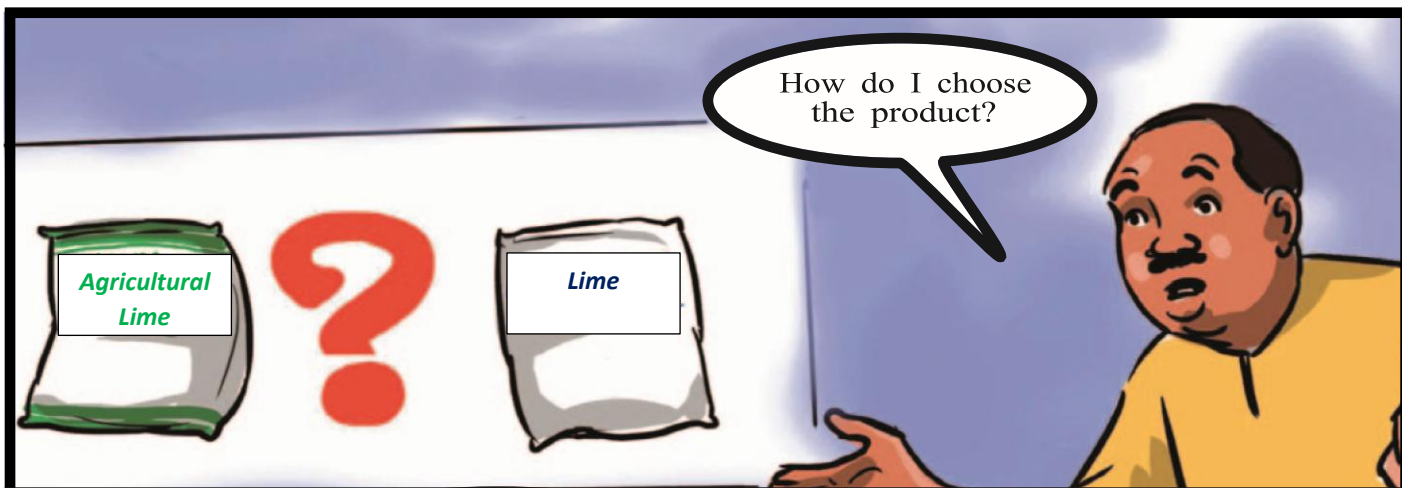
WHAT TYPE OF LIMING?

Recovery liming: pH between 3 and 4

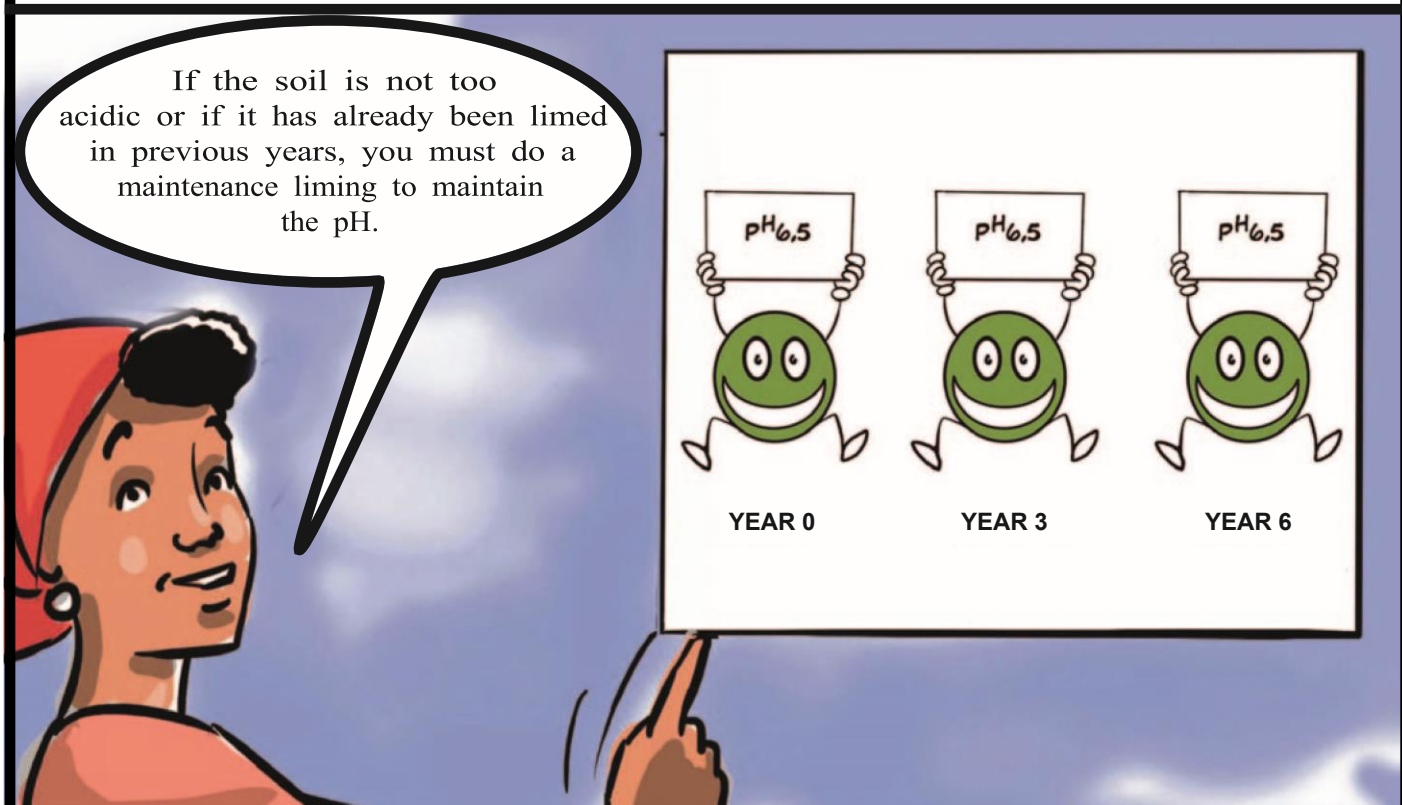
If the soil is very acidic, you must do a recovery liming to raise the pH quickly.



In the first year, the advisor recommends applying 500 kg to 1000 kg (or 1/2 to 1 ton) of dolomite per hectare. Then, each subsequent year, you can add 300 to 500 kg for maintenance.



Maintenance liming: pH between 5 and 6

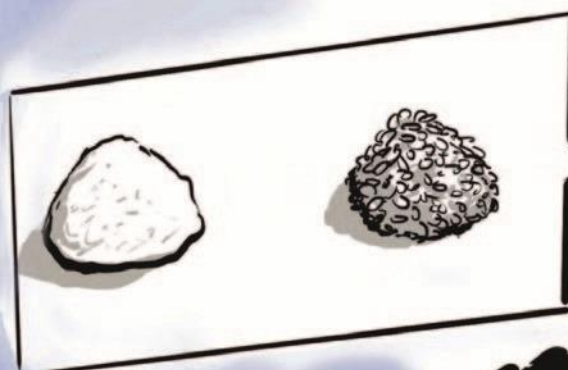


Every three years, 300 kg of dolomite per hectare must be spread.

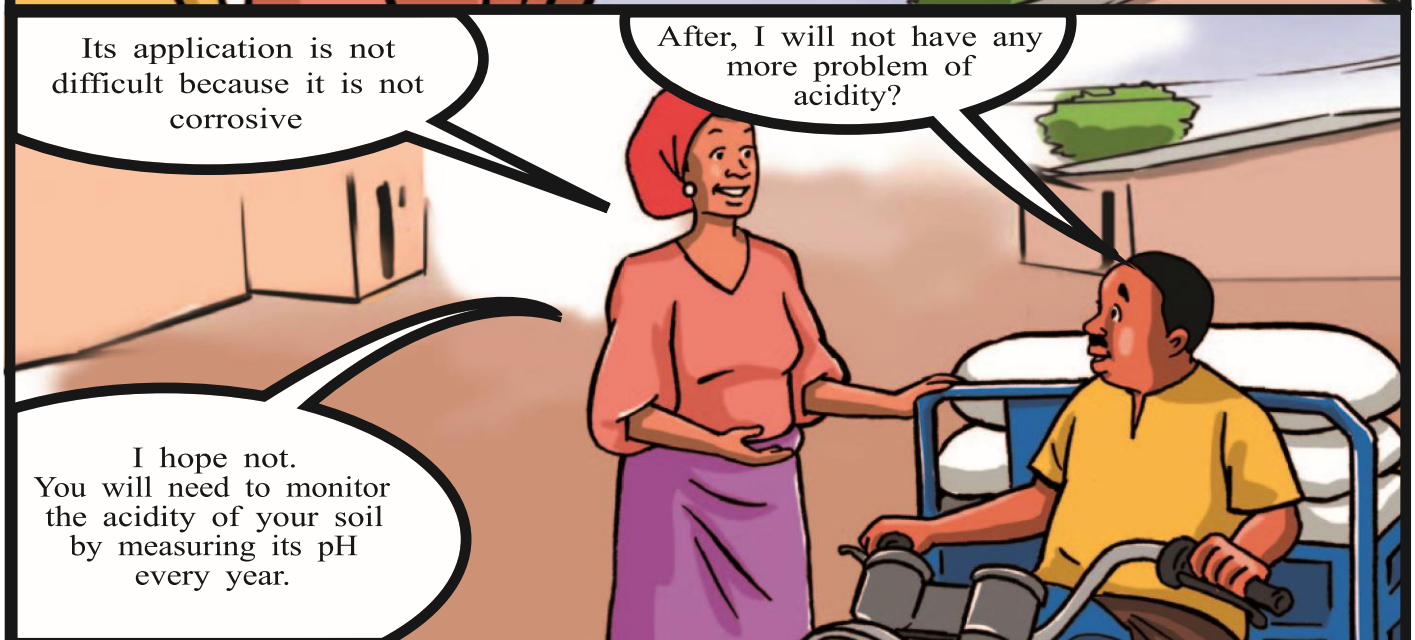



For maintenance liming, you should use dolomite in the form of a mixture of powder and granules.

The fine elements dissolve quickly in the soil and the others will dissolve slowly over time.



HOW AND WHEN TO LIME MY SOIL ?





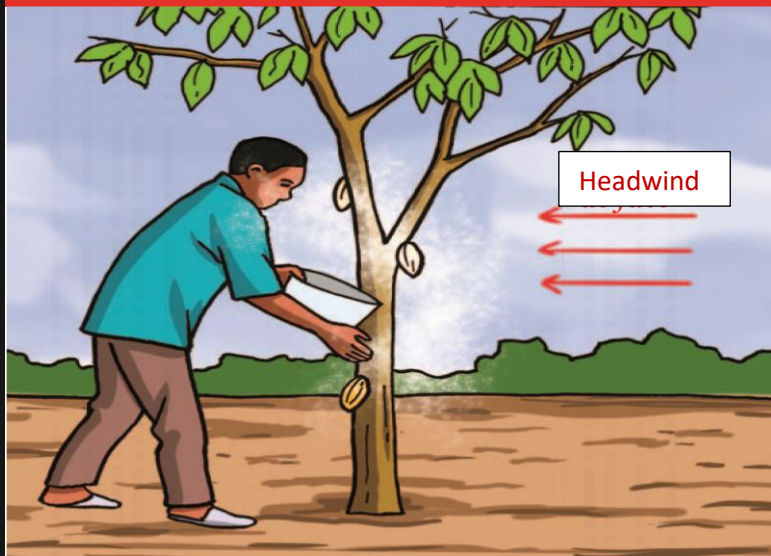
Also, you need to be careful with your practices to keep your soil the least acidic possible: do not use too much nitrogen fertilizer, don't let the soil bare, protect your soil from water and wind erosion.

When should I lime?

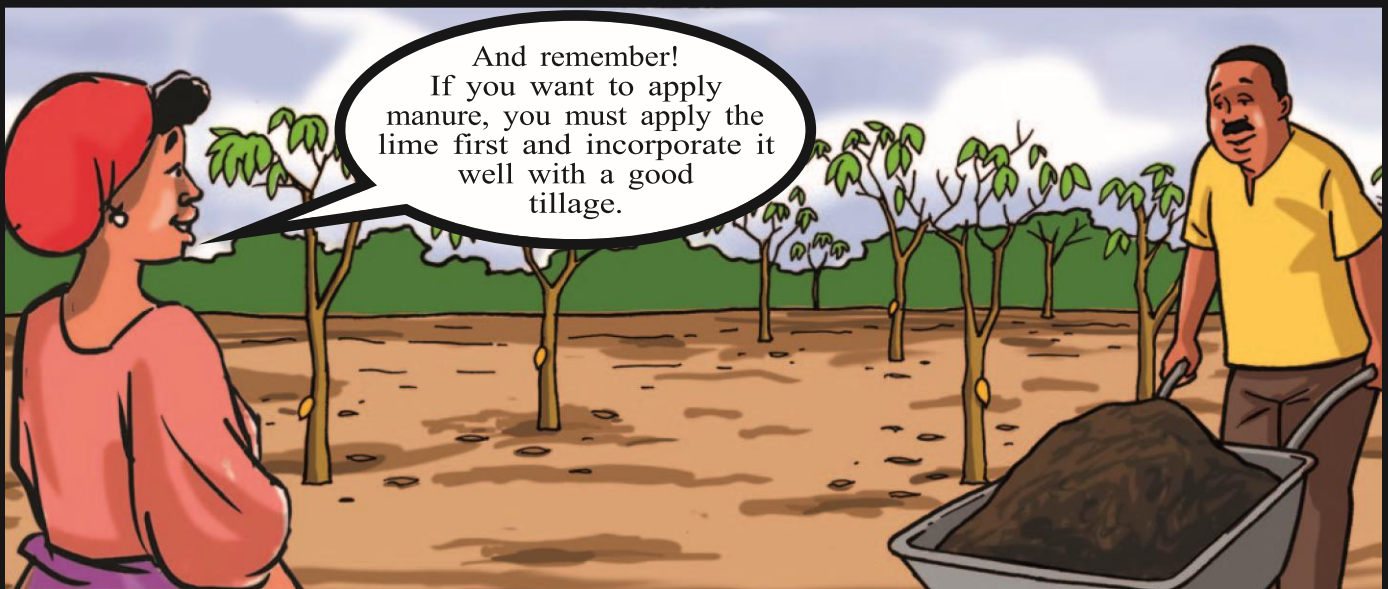
You should lime only if the soil is acidic, preferably in between crops.

You can apply lime by hand.

DO NOT DO THIS



WHAT TO DO IN CASE OF WIND





Several months
later

Look! My trees are doing better! My
production will be good this year!



At harvest

My pods are bigger and there
are lots of them!



The effect of the dolomite has made fertilizer available to the plant. As a result of liming, Abraham's income increased by 40% and his potato tubers are better preserved. Abraham and Hawa decide to spread the good news at the village square.



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