

How manages

SOIL TESTING

IS CRUCIAL IN

KNOWING THE

NUTRIENT CONTENT

OF YOUR SOIL

EXCESSIVE

FERTILIZER USE CAN

ALSO CAUSE SOIL/WATER

POLLUTION, AFFECTING THE

QUALITY OF DRINKING

WATER AND THAT OF

ENVIRONMENT

Si

EXCESS <-NUTRIENTS

 Inappropriate sources, rates, placement and timing of application of mineral and organic fertilizers

> Unsustainable livestock management (e.g. exceeding livestock carrying capacity)

LACK OF NUTRIENTS

 Limited access to and availability of mineral and organic fertilizers

 Soil degradation processes (e.g. erosion, salinity) preventing crop response to nutrient additions and causing soil nutrient losses

> • Plant uptake and soil depletion

Chlorosis (loss of color)

Burn

Turning red

LACK OR EXCESS OF NUTRIENTS CAN SHOW ON CROPS' LEAVES, ROOTS AND FRUITS. HOWEVER, SYMPTOMS CAN VARY DEPENDING ON THE PLANT, NUTRIENT, SOIL TYPE, PH, WATER

STATUS AND WEATHER CONDITIONS



Interveinal chlorosis

> Brown leaf margin

Crinkling

Healthy

leaf

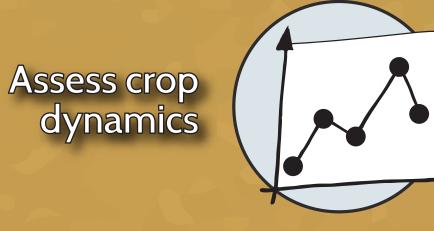


ABLE NUTRIENT ABALANCED SUPP.

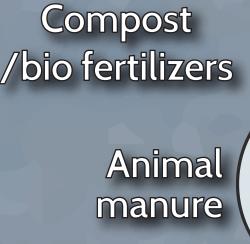
















RIGHT SOURCE







Assess field

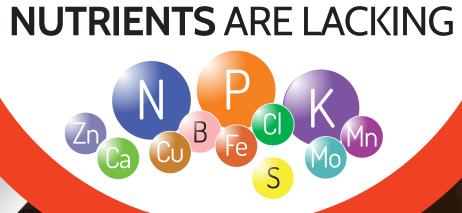
logistics and

weather

RIGHT PLACE RIGHT RATE



Assess soil nutrient supply and crop nutrient demand



WATCH OUT!

OFTEN PRIMARY NUTRIENTS

ARE ADDED IN EXCESS WHILE

SECONDARY AND MICRO

EXAMPLES OF SUSTAINABLE MANAGEMENT

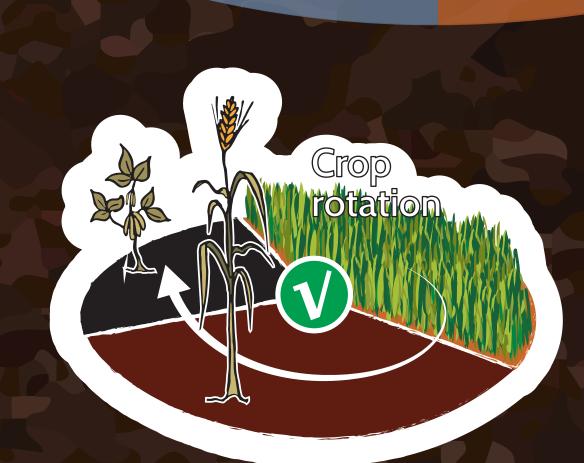


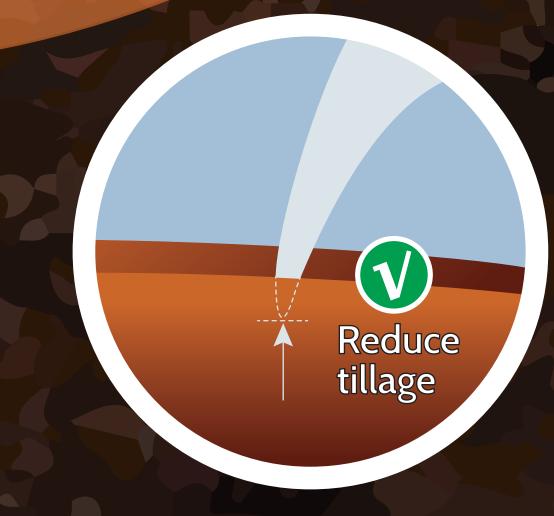




Excess of one nutrient can limit the uptake of another. If one of the essential plant nutrients is deficient, plant growth will be poor even if all other essential nutrients are sufficient [Liebig's law of minimum]









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