

WHAT IS TERROIR?



terroir

noun | ter·roir | /tɛr'wa:/ | tehr-WHAHR

1. The characteristic sensory traits of taste and flavor imparted to a wine by the environment in which it is produced.
2. The complete natural environment in which a particular wine is produced, including factors such as the soil, topography, and climate.

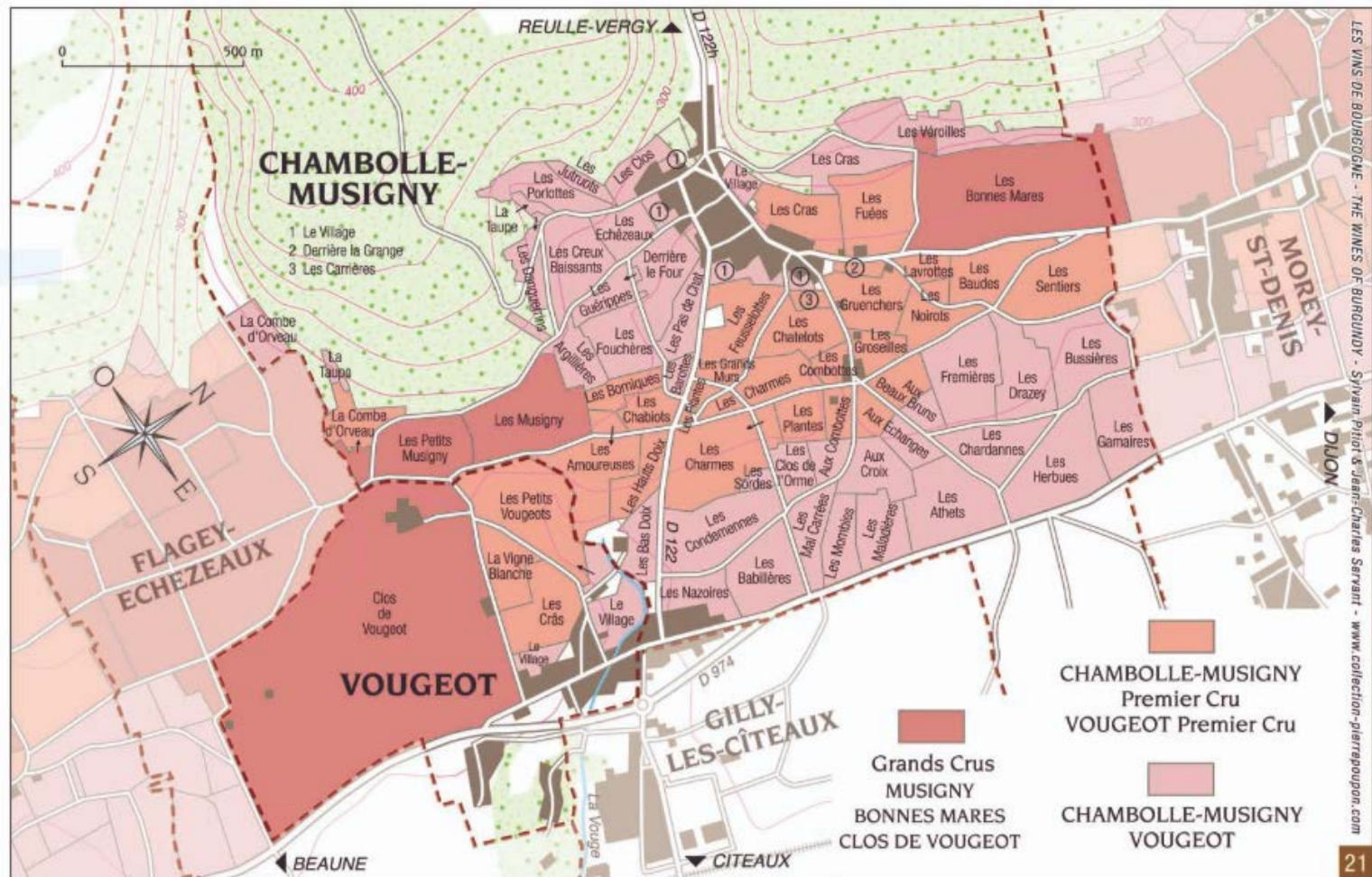
SENSORY TRAITS SPECIFIC TO A VINEYARD OR REGION



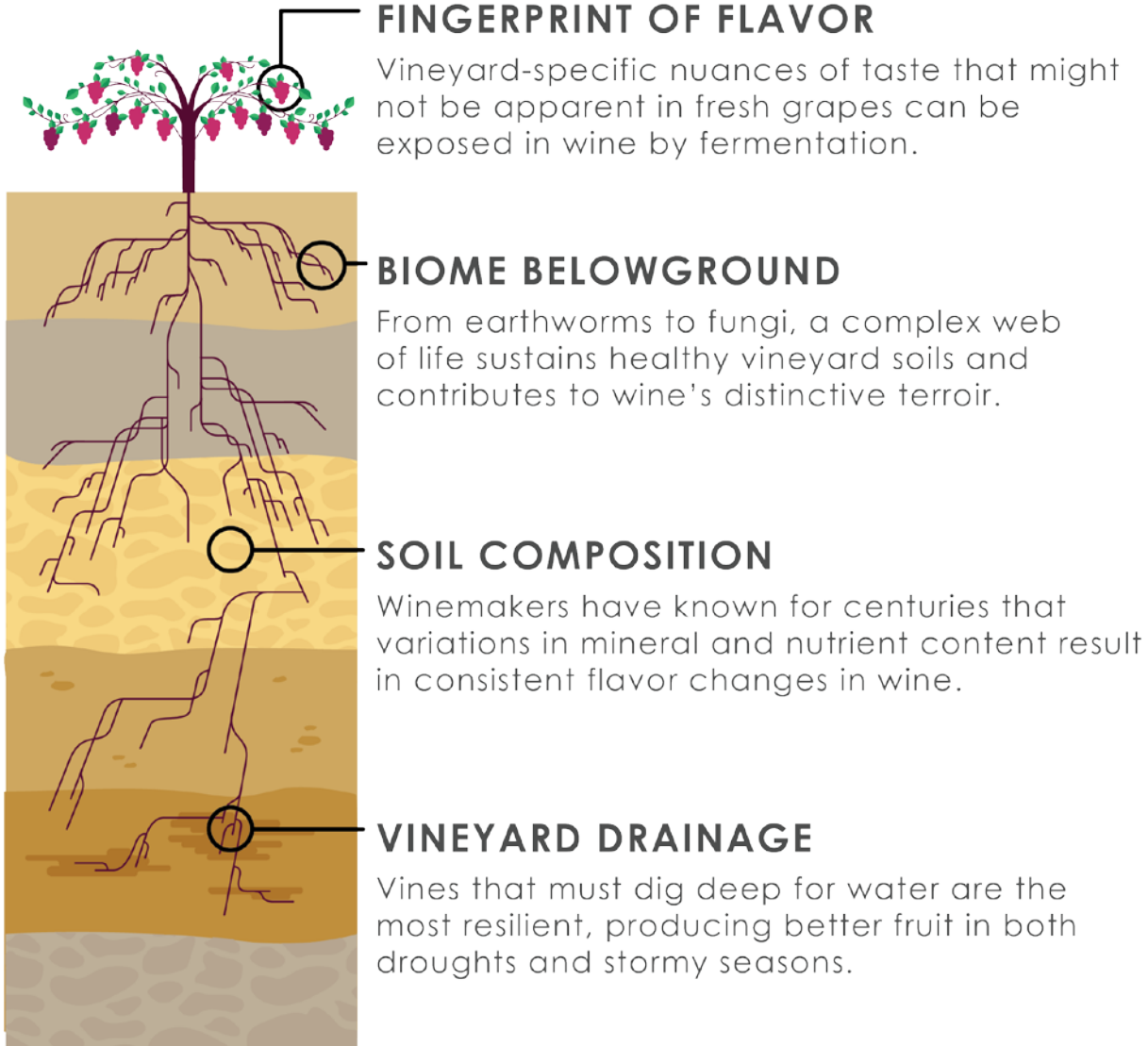
TASTEABLE ASPECTS OF THE VINEYARD ENVIRONMENT



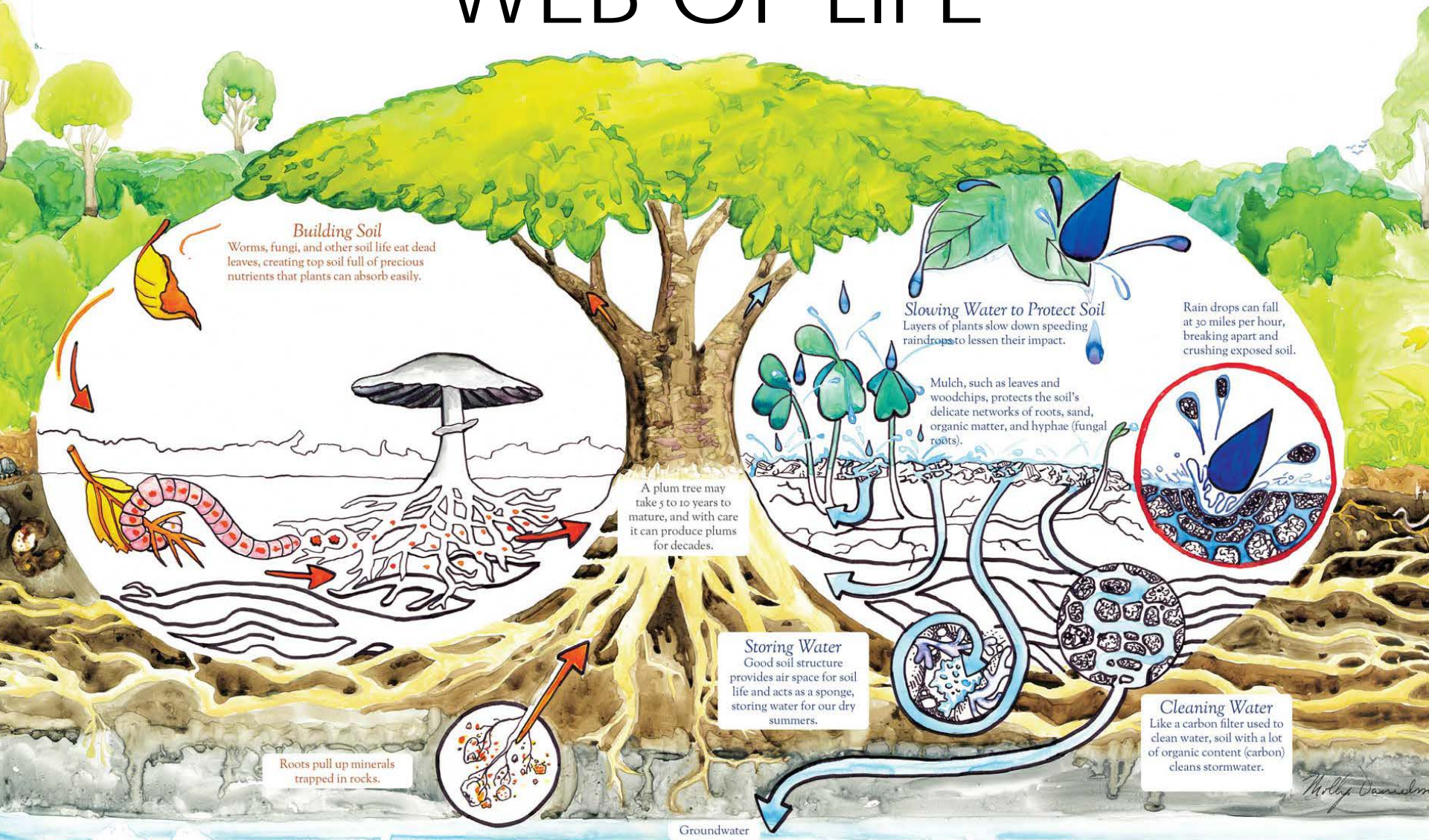
ALSO IN FRENCH: TERM FOR A FINE WINE VINEYARD SITE



WHAT IS TERROIR?

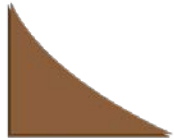


INTERCONNECTED WEB OF LIFE



4 INFLUENCES OF TERROIR

TERRAIN



NORTH OR SOUTH
FACING



ELEVATION/
ALTITUDE

CLIMATE



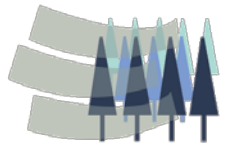
COLD



HOT



WINDY



FOGGY

TRADITION



TECHNIQUE + WINÉMAKER

SOIL



ROCK + MINERAL DEPOSITS



DENSITY

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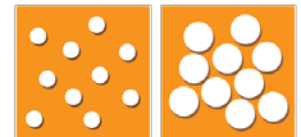


TECHNIQUE + WINÉMAKER

SOIL



ROCK + MINERAL DEPOSITS



DENSITY

WHY DOES SOIL MATTER?



WHY DOES SOIL MATTER?

1. SOILS AFFECT PLANT GROWTH, HEALTH & FRUIT DEVELOPMENT



WHY DOES SOIL MATTER?

2. WHEN GROWN WITHOUT SOIL,
FRUITS & VEGETABLES LACK FLAVOR.



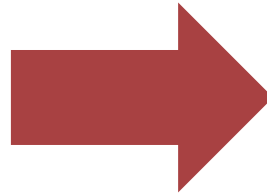
WHY DOES SOIL MATTER?

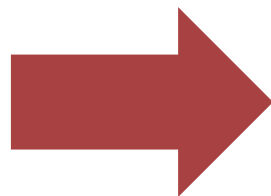
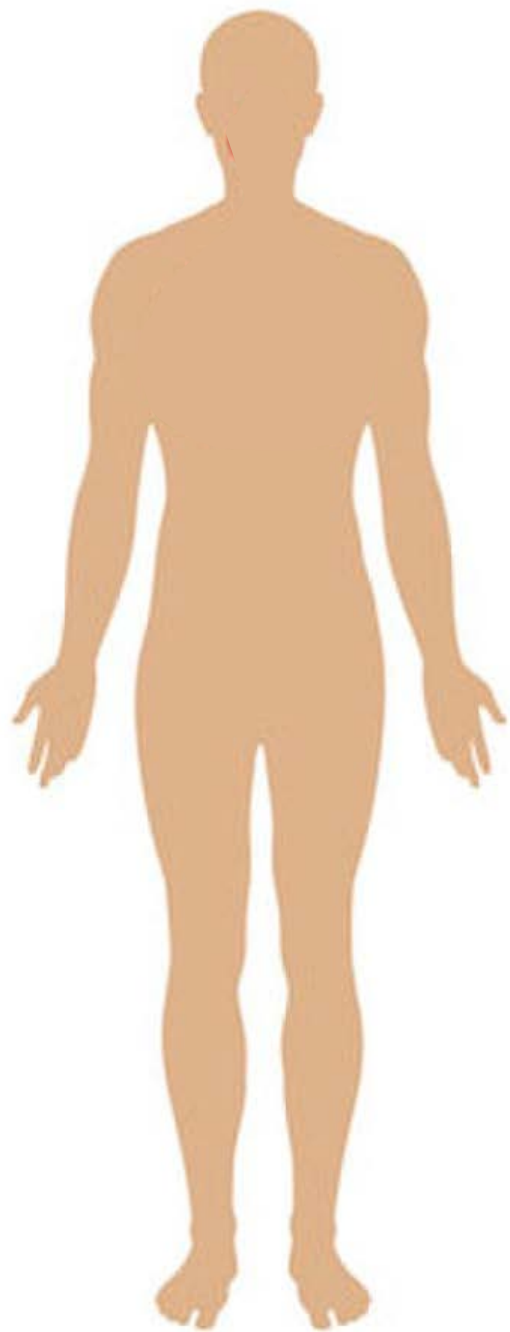
3. DIFFERENT SOILS YIELD DIFFERENCES
WE CAN TASTE, ESPECIALLY IN WINE



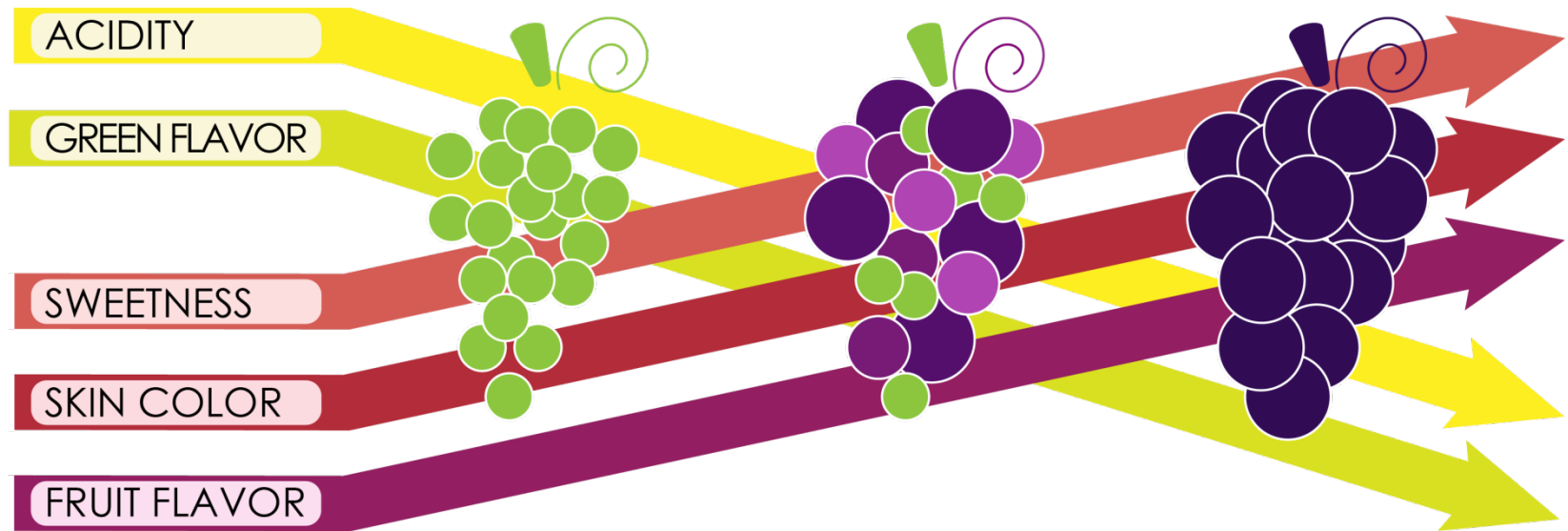
WHY DOES SOIL MATTER?

4. FERMENTATION MAKES SOIL-DRIVEN TERROIR TRAITS MORE PROMINENT





DIFFERENT SOILS CAN SLOW DOWN OR SPEED UP THE RIPENING PROCESS



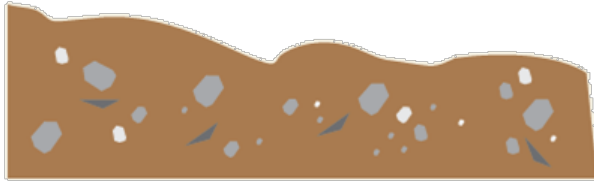
DIFFERENT SOILS CAN
INCREASE OR DECREASE
THE VINE'S WATER UPTAKE



DIFFERENT SOILS CAN
FOCUS VINE ENERGY ON FRUIT
(OR ROOT OR LEAF OR WOOD)

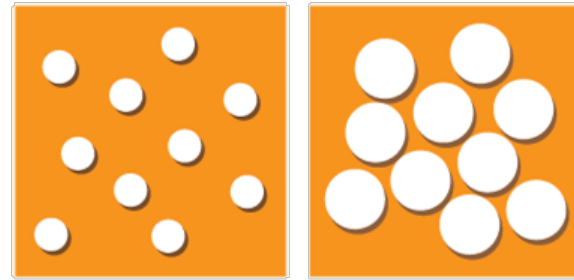


SOIL



SOIL INGREDIENTS

- ORGANIC MATERIAL AFFECTS FERTILITY (MULCH, COMPOST)
- MINERALS: AFFECT VINE HEALTH & FRUIT DEVELOPMENT



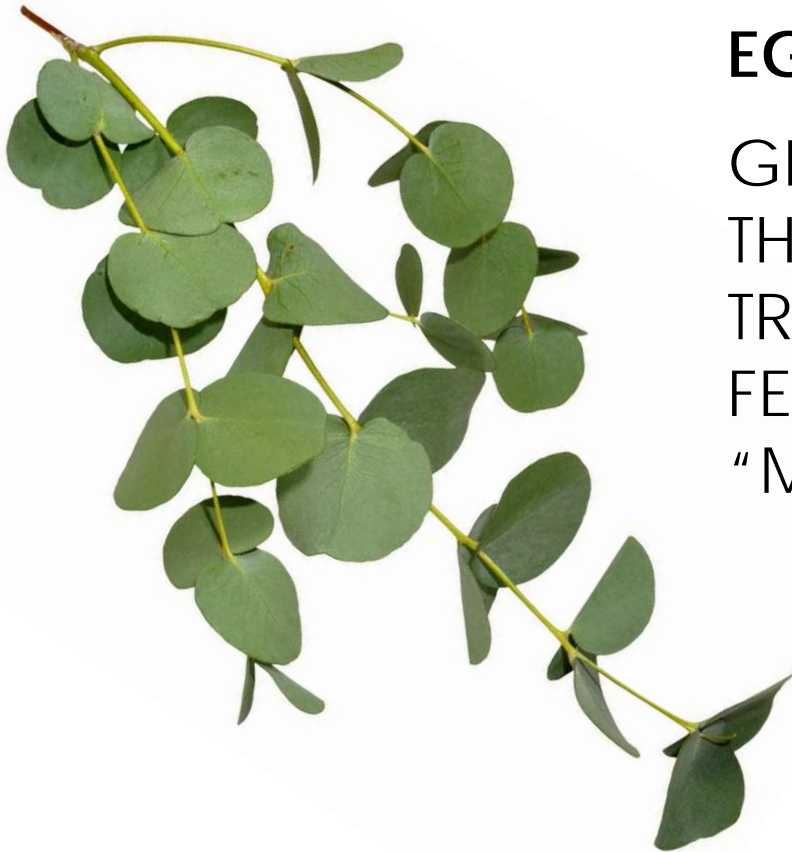
SOIL STRUCTURE

- TOPSOIL/SUBSOIL: THIN TOPSOIL & PENETRABLE SUBSOIL
- KEY TRAITS: SOIL'S WATER RETENTION (DRAINAGE), HEAT RETENTION (COLOR, PARTICLE MASS), etc...

SOIL FERTILITY DEPENDS ON ORGANIC MATTER



OTHER PLANTS CAN AFFECT GRAPES & WINE



EG. EUCALYPTUS

GRAPES GROWN NEAR
THESE STICKY, SAPPY
TREES MAKE WINES THAT
FEATURE A DISTINCTIVE
“MINTY” SCENT AND FLAVOR

MINERAL CONTENT DEPENDS ON SOIL COMPOSITION



NITROGEN

ESSENTIAL FOR
PRODUCING
GREEN
MATTER



MAGNESIUM

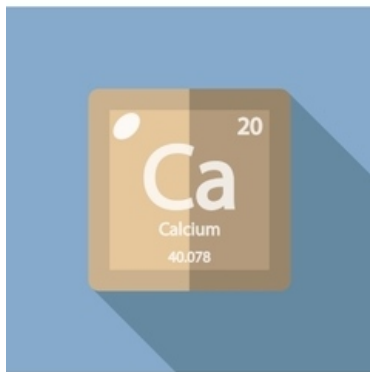
ESSENTIAL FOR
CHLOROPHYLL
AND PHOTO-
SYNTHESIS



PHOSPHORUS

BOOSTS ROOTS
AND SPEEDS
RIPENING

MINERAL CONTENT DEPENDS ON SOIL COMPOSITION



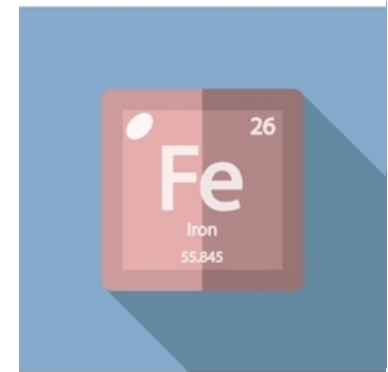
CALCIUM

NEUTRALIZES
ACIDITY &
FEEDS ROOT
SYSTEMS



POTASSIUM

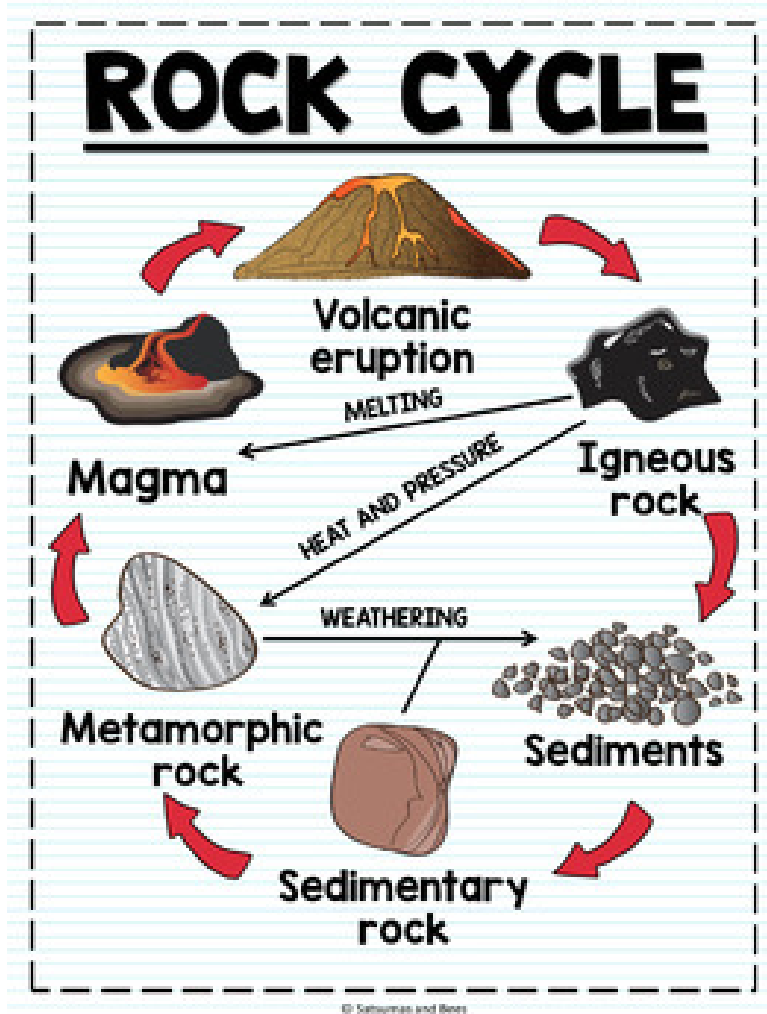
ENRICHES SAP
& BOOSTS
FRUIT YIELDS



IRON

ESSENTIAL FOR
PHOTO-
SYNTHESIS

SOIL COMPOSITION DEPENDS ON SOIL SOURCE



**VOLCANIC SOURCE:
IGNEOUS ROCK**

EG. GRANITE, BASALT

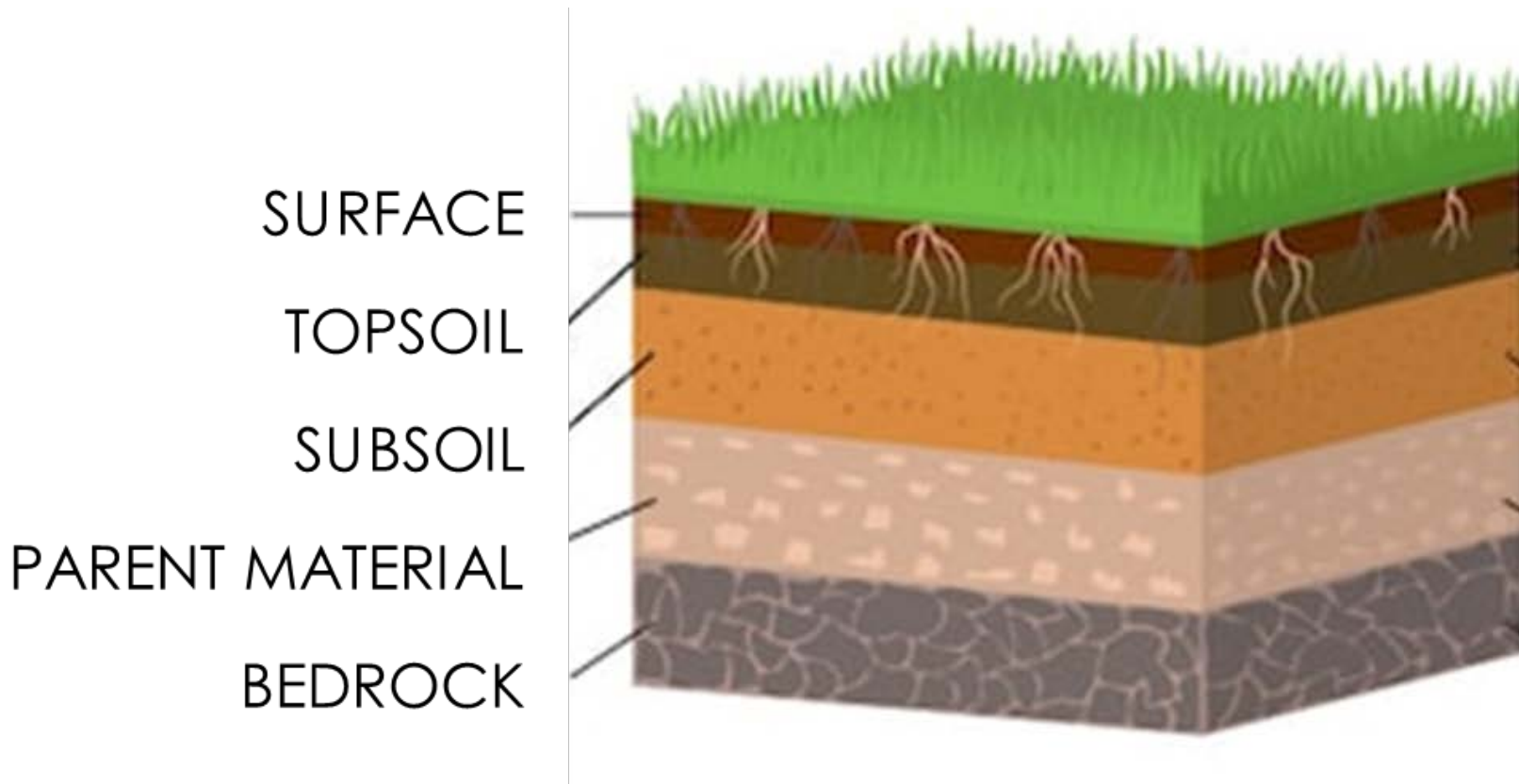
TEND TO BE ACIDIC
INFLUENCE ON SOIL

**ANCIENT SEABED SOURCE:
SEDIMENTARY ROCK**

EG. LIMESTONE, SHALE

TEND TO BE ALKALINE
INFLUENCE ON SOIL

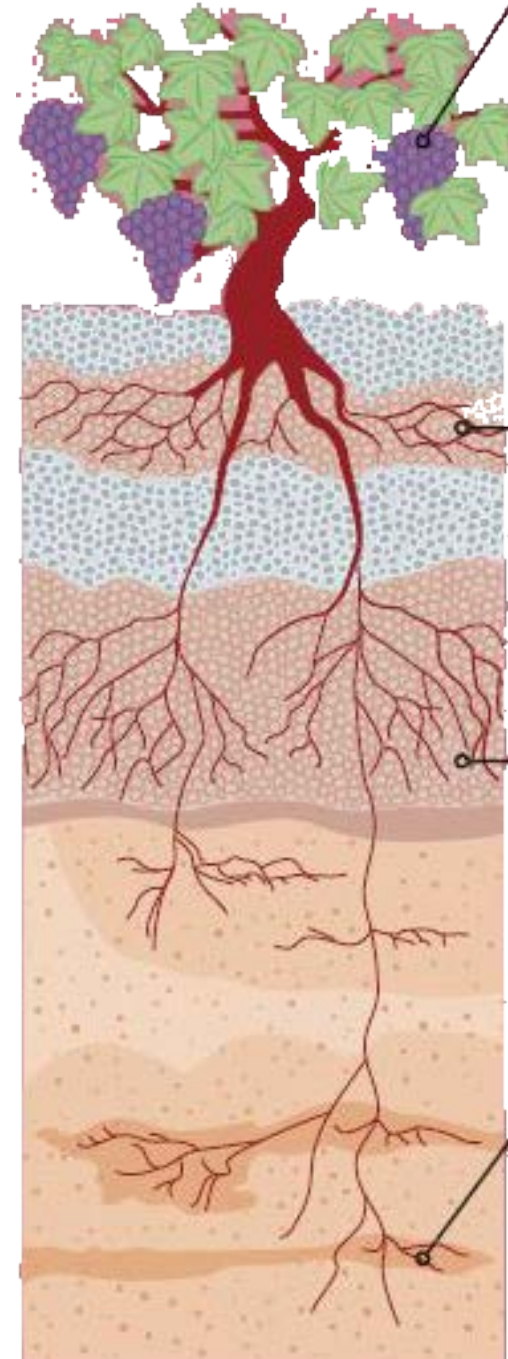
SOIL STRUCTURE VARIES BY SOIL LAYER



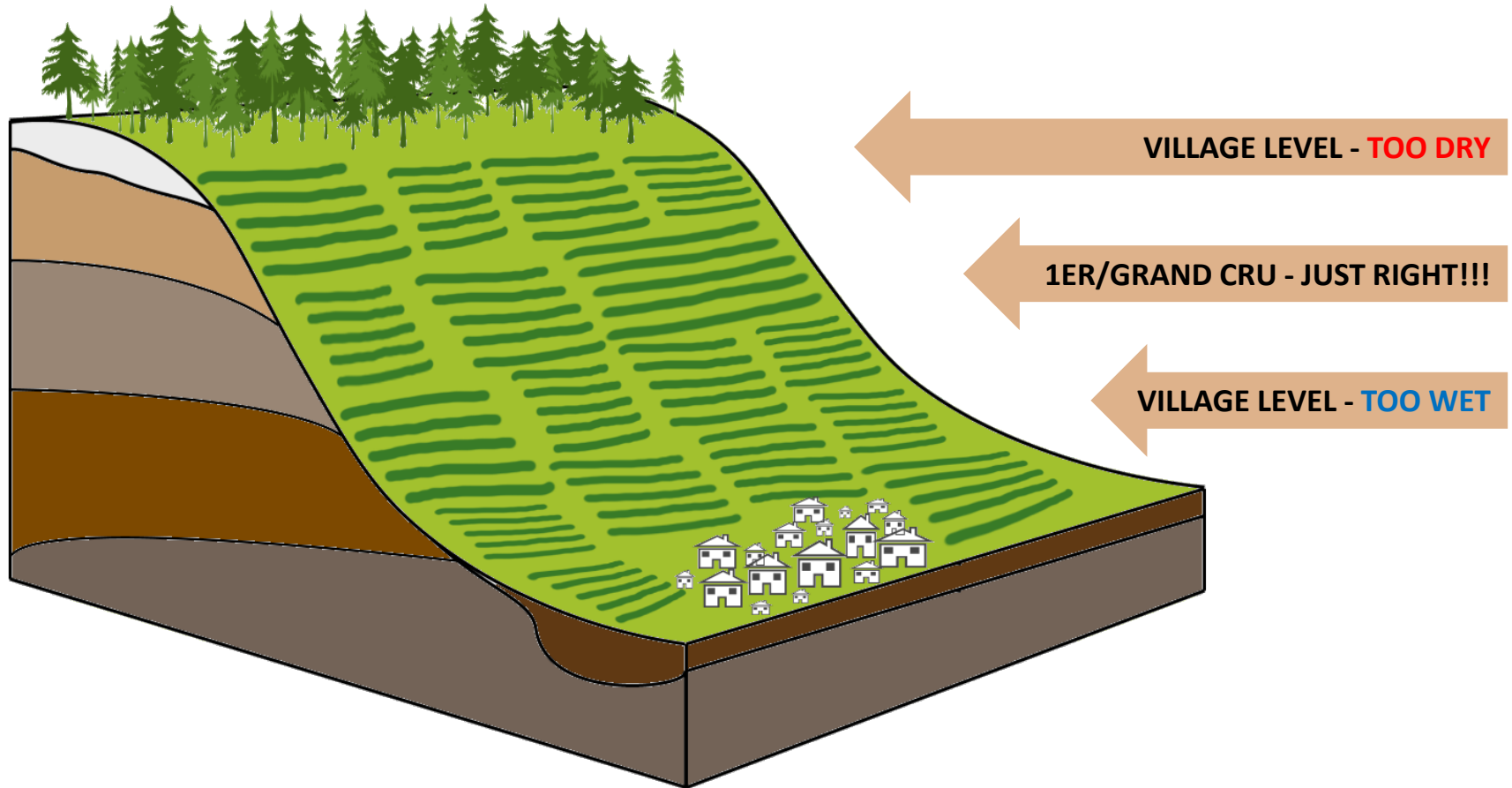
IF VINES CAN GET ALL
THE WATER THEY NEED
NEAR THE SURFACE, THEY
WON'T DIG DOWN DEEP.

BEST FOR FINE WINE:

- 1 – PERMEABLE SOIL
- 2 – HIGHER SOIL LAYER
IS WELL-DRAINED
- 3 – LOWER SOIL LAYERS
RETAIN MOISTURE



DRAINAGE IS A KEY FACTOR IN BURGUNDY CRU RANKS



STONY TOPSOIL RETAINS & RADIATES HEAT



GALET STONES IN
CHATEAUNEUF DU PAPE



GRAVEL BEDS IN
MÉDOC, BORDEAUX

PALE TOPSOIL REFLECTS SUNLIGHT



CHALKY SOILS IN CHAMPAGNE (LEFT) AND CHABLIS (RIGHT)

PALE TOPSOIL REFLECTS SUNLIGHT



CHALKY SOILS IN CHAMPAGNE (LEFT) AND CHABLIS (RIGHT)

WHICH IS WHY WINEMAKERS LOVE TALKING “DIRT”



BUT PLEASE AVOID “TALKING DIRTY” WITH GUESTS

THE IDEA OF DIRT
(OR MICRO-ORGANISMS!)
AFFECTING THE
TASTE OF WINE CAN
BE A SERIOUS
YUCK FACTOR
FOR MANY
AMERICANS

