

SOIL FUNCTIONING IN RELATION WITH PLANT ACTIVITY

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For agricultural understanding, the soil is generally considered as a whole, characterized by physical and chemical properties of each horizon.

This analysis is however insufficient to approach relations between soil and plant.

The author states that it is necessary to study the microstructures at the soil-root interface to understand the behaviour of plant in situ.

Starting from concret (practical) examples the author emphasizes not only the influence of environmental conditions on root activity, but also the part played by those roots in the soil and the physico-chemical modifications they induce in their close environment.

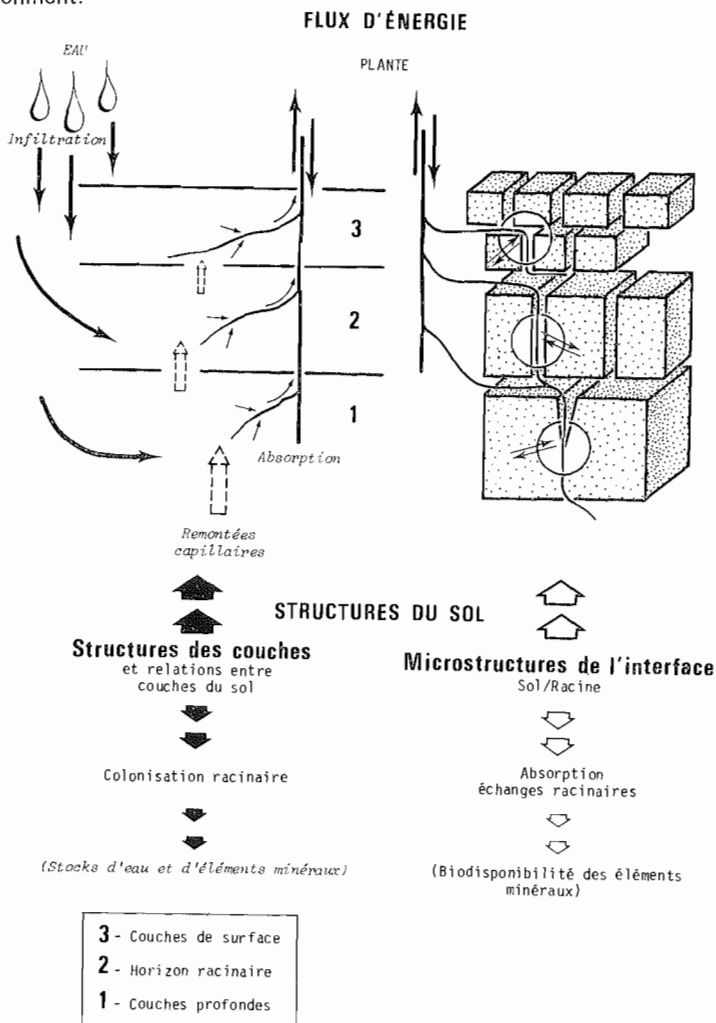
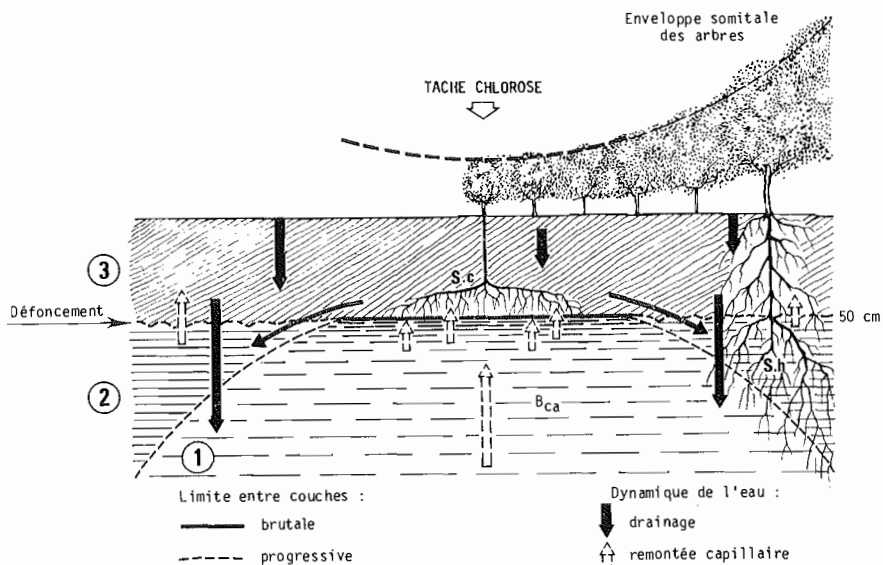


Figure 4 : Interaction at the soil/root interface.

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Distribution des racines : S.c = concentrée à la discontinuité S.h = uniformément répartie

INTERFACE SOL / RACINE

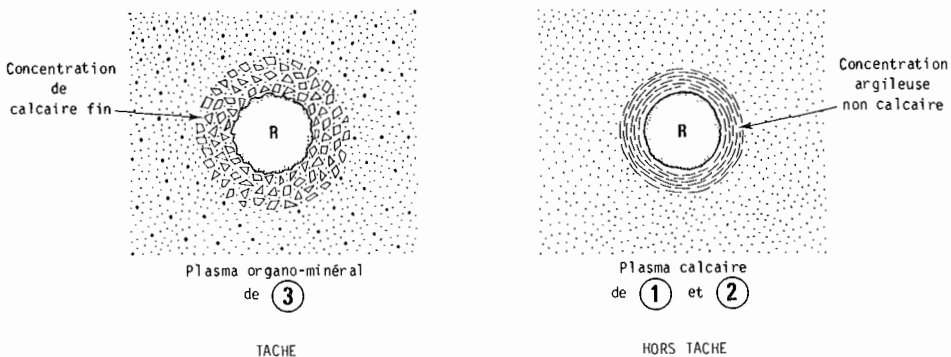


Figure 7 : Relationship exemple between chlorosis space, depth of B horizon and water flow.