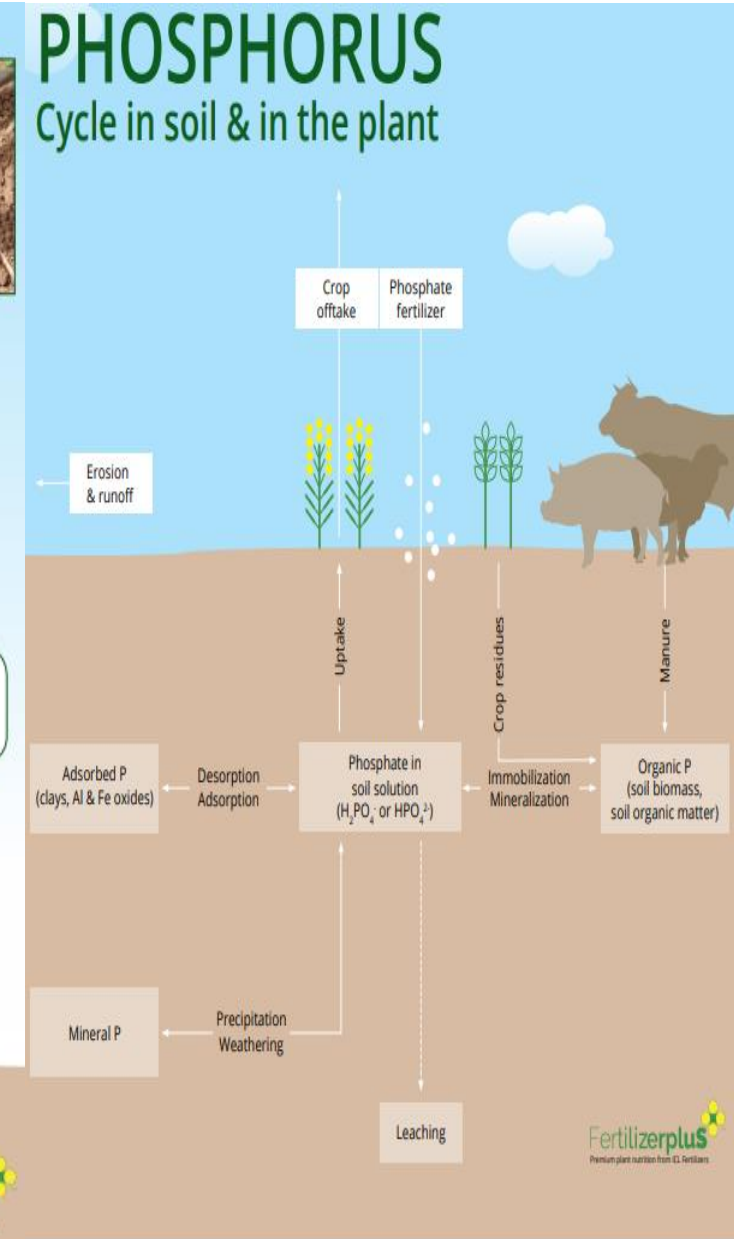
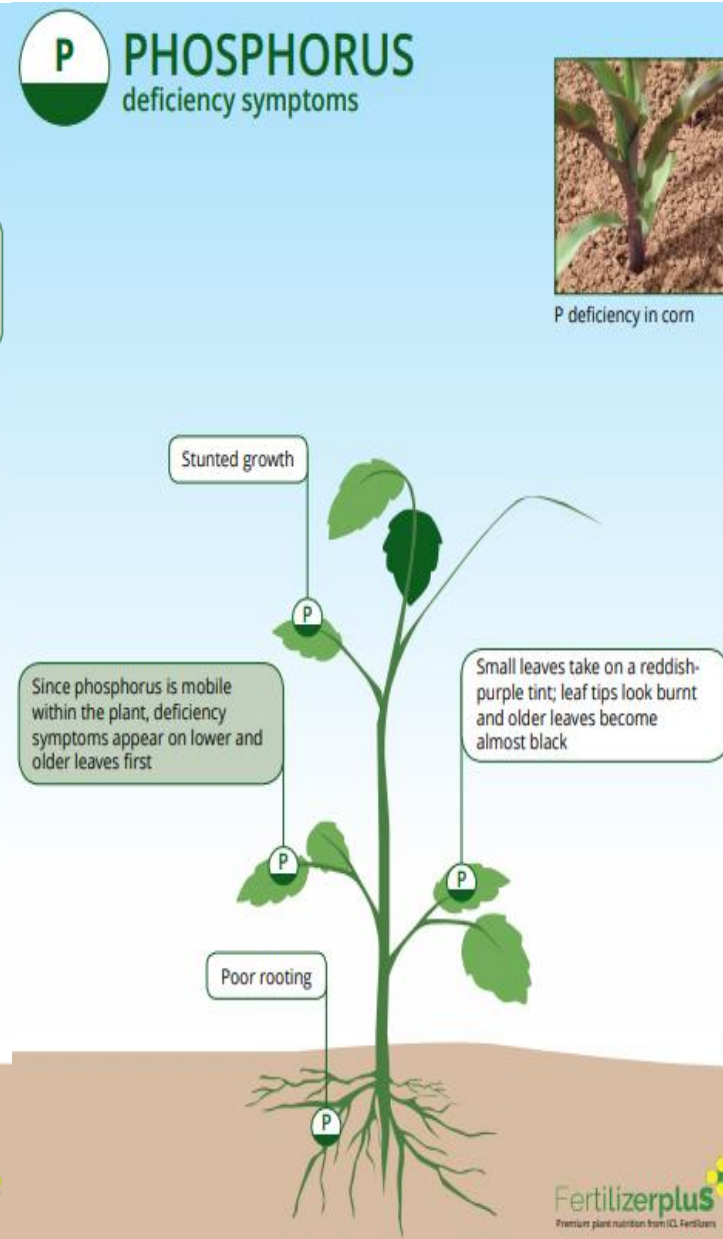
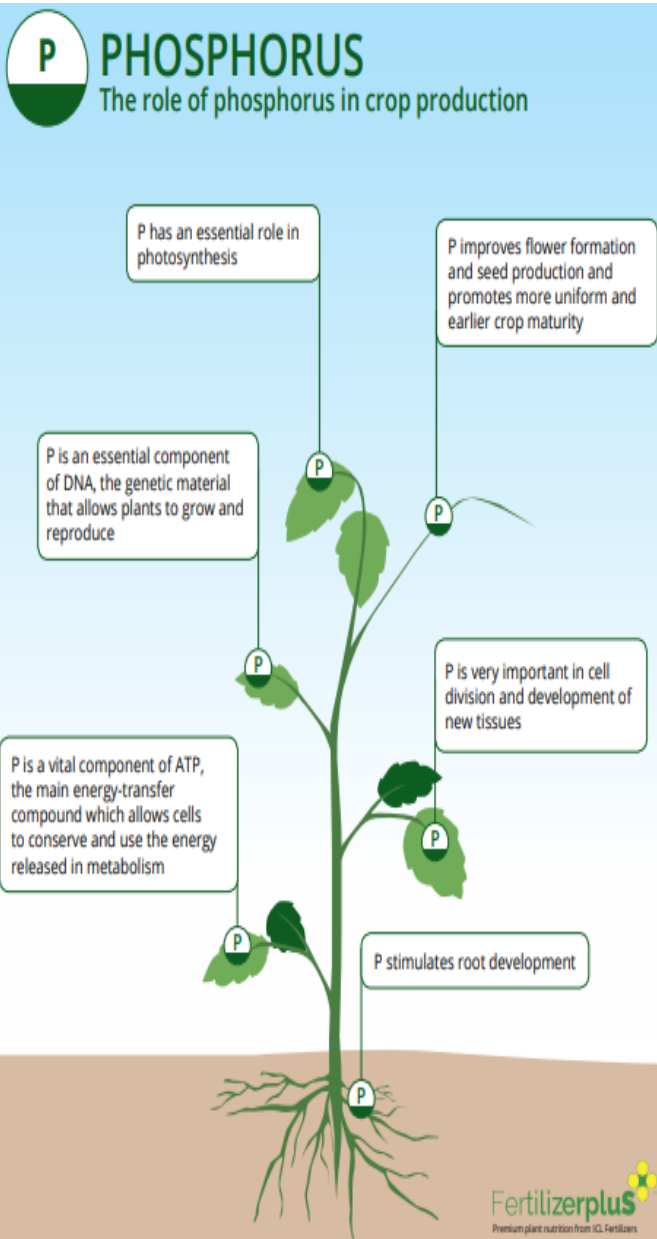


# Phosphorus in Fertilizers



Phosphorus (P) plays an important role in crop production (left image). P allows plants to develop roots, new tissues, seeds, and flowers, and is essential to the proper functioning of photosynthesis, DNA, cell division, and ATP, the main energy-transfer compound of cells. Symptoms of P deficiency in plants included stunted growth, poor rooting, and reddish-purple tinted leaves (center image). P levels in soil are reduced over time due to erosion, runoff, and leaching, but may be replenished through animal manure and phosphate fertilizers (right image).