



Potato nutrient uptake curve

In the first growing stages, it is the seed tuber that provides the growth energy and the raw materials to the new plant. Once the plant has exhausted its internal reserves of nutrients, it must absorb nutrients from the soil in order to continue its rapid growth. The crop primarily develops foliage and roots for the first five to six weeks after emergence. At the end of this phase, the roots typically reach 72 percent of their exploration depth and more than 82 percent of foliage development. Afterward, the tuber begins to grow faster, with most growth occurring between the seventh and fifteenth weeks. By this point, the tubers will have reached 95 percent of their final fresh weight. According to Contreras (2002), before flower initiation, 70 to 75 percent of the nutrients are absorbed, and most dry matter is produced. During this period of rapid tuber growth, highly soluble fertilizers are crucial for ensuring that a nutritional supply is available to the potato plant.

