



Although phosphorus is the **11th most common element in the earth's crust**, its concentration in many rocks is relatively wide, with a P_2O_5 content ranging between 2% and 40% based on rock formations.

The main source of phosphorus in fertilizer is phosphate rock, which is typically mined from either **igneous rock or sedimentary rock deposits** formed from fossilized marine animal remains.



Phosphate rock is generally turned into fertilizer through chemical processes involving acidification using sulphuric, phosphoric or nitric acid.

The bulk of phosphate rock production, close to **80% of global output**, is earmarked for the **manufacturing of phosphorus-based fertilizers**. Using sulphuric acid to produce fertilizer from phosphate rock is the primary industrial market for the acid and the biggest industrial use for sulphur.



Currently, the most widely used phosphorus-based fertilizers are **Di-ammonium phosphate (DAP)** and **Mono-ammonium phosphate (MAP)**.

