

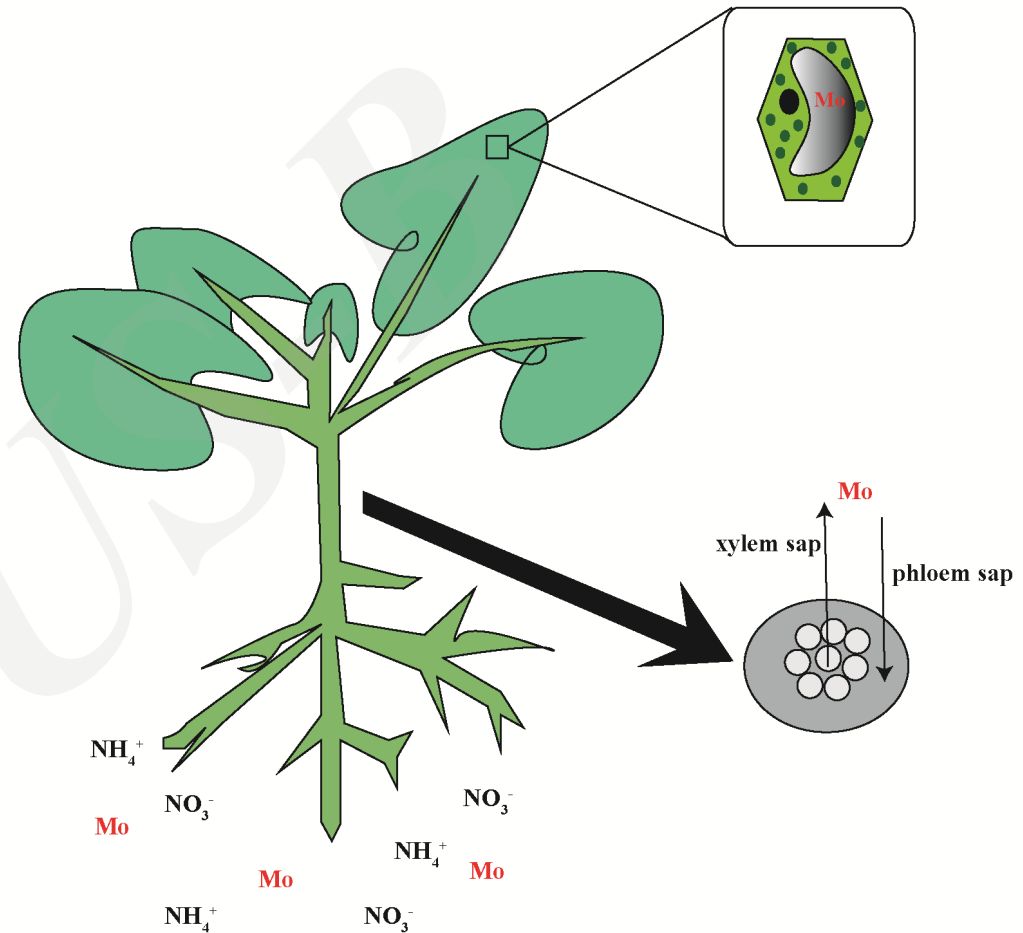
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# **Uptake, transport and distribution of molybdenum in two oilseed rape (*Brassica napus* L.) cultivars under different nitrate/ammonium ratios**

**Key words:** *Brassica napus* L., Nitrogen source, Xylem and phloem transport, Subcellular distribution

# Research Summary

This study is to investigate the effects of different nitrate source on molybdenum (Mo) uptake, transportation, and distribution between two oilseed rape (*Brassica napus* L.) cultivars. Main Mo determination in the following aspects:



- 1) Root, stem, leaf; 2) Xylem and phloem sap; 3) Cell wall, organelle, and soluble fraction in mesophyll cell

# *Main conclusions*

- **Equal**  $\text{NO}_3^-:\text{NH}_4^+$  ratio is conducive to growth and Mo uptake of oilseed rape
- **Uptake** of Mo is reduced under high  $\text{NH}_4^+$  nutrition.
- **The** uptake, transport, and distribution in soluble fraction of high Mo accumulated cultivar, ZS11, are higher than that of low Mo accumulated cultivar L0917.



# ***Innovation points***

**Point 1 | Two different Mo uptake cultivars were used in our experiment.**

**Point 2 | Evaluate the effects of four  $\text{NO}_3^-:\text{NH}_4^+$  ratios on oilseed rape growth and Mo uptake, transport, and distribution in subcellular fraction.**