

## SIMPLIFIED KEY TO SOIL ORDERS

**If soil has:**

	<b>Order*</b>
Permafrost within 200 cm of the ground surface	<b><u>Gelisols</u></b>
Other soils with more than 30% organic matter to depth of 40 cm	<b><u>Histosols</u></b>
Other soils with a Spodic horizon within 2 m	<b><u>Spodosols</u></b>
Other soils with > 35 cm of Andic soil properties and no Albic horizon	<b><u>Andisols</u></b>
Other soils with an Oxic horizon with 1.5 m and no Kandic horizon, or those that contain ≥ 40% clay in the surface 18 cm and have a Kandic horizon within 1.5 m	<b><u>Oxisols</u></b>
Other soils with more than 30% clay in all horizons; some cracks when dry at 50 cm	<b><u>Vertisols</u></b>
Soils that are dry more than 50% of the year and have no Mollic epipedon	<b><u>Aridisols</u></b>
Other soils that have an Argillic or Kandic horizon but a B.S. at pH 8.2 less than 35% at a depth of 1.8 m	<b><u>Ultisols</u></b>
Other soils that have a Mollic epipedon with BS ≥ 50% throughout	<b><u>Mollisols</u></b>
Other soils that have an Argillic or Kandic horizon	<b><u>Alfisols</u></b>
Other soils that have an Umbric, Mollic, or Plaggen epipedon, or a Cambic horizon	<b><u>Inceptisols</u></b>
Other soils	<b><u>Entisols</u></b>

B.S. = [(Exchangeable Ca<sup>2+</sup> + Mg<sup>2+</sup> + K<sup>+</sup> + Na<sup>+</sup>)/CEC] x 100; CEC = cation exchange capacity.

\*The bold and underlined part is what shows up in a taxonomic name. E.g. Argixeroll ends with oll meaning Mollisol.