

**Tab. 21.2:** Comparative conditions in soils of *Fagus* and *Picea* forests at the German site Schacht and Waldstein.

	<i>Fagus</i> (Schacht)		<i>Picea</i> (Waldstein)	
Base saturation in 0-10 cm depth [%]	9.7 $\pm$ 2.2		4.0 $\pm$ 1.1	
Concentrations in LFH-horizon [ $\mu$ g g <sup>-1</sup> ]				
NH <sub>4</sub> <sup>+</sup>	108.2 $\pm$ 44.2		44.0 $\pm$ 27.1	
NO <sub>3</sub> <sup>-</sup>	81.8 $\pm$ 30.5		29.5 $\pm$ 26.6	
Concentrations in soil water [mg l <sup>-1</sup> ]	25cm	90cm	25cm	90cm
DOC-C 25 cm	5.9 $\pm$ 1.3	2.7 $\pm$ 0.6	17.6 $\pm$ 4.1	2.9 $\pm$ 0.9
DON-N 25cm	0.1 $\pm$ 0.2	0.1 $\pm$ 0.2	0.6 $\pm$ 0.6	0.5 $\pm$ 0.5
NO <sub>3</sub> <sup>-</sup> -N 25cm	0.2 $\pm$ 0.5	0.1 $\pm$ 0.3	2.3 $\pm$ 1.9	2.8 $\pm$ 1.8
NO <sub>3</sub> <sup>-</sup> flux at 25 cm depth [kg N ha <sup>-1</sup> yr <sup>-1</sup> ]	1.2		9.2	
DON flux at 25 cm depth [kg N ha <sup>-1</sup> yr <sup>-1</sup> ]	0.7		2.5	
DOC flux at 25 cm depth [kg C ha <sup>-1</sup> yr <sup>-1</sup> ]	31.7		69.7	
Mineralisation rate in LFH horizon				
[kg C ha <sup>-1</sup> yr <sup>-1</sup> ]	1100 $\pm$ 397		1387 $\pm$ 538	
[kg NO <sub>3</sub> -N ha <sup>-1</sup> yr <sup>-1</sup> ]	21.7 $\pm$ 10.2		28.7 $\pm$ 28.6	
Change in stable isotopes	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$
between L and 5cm soil o/oo	+4.5 $\pm$ 0.1	0 $\pm$ 0.4	+5.6 $\pm$ 0.8	-0.34 $\pm$ 0.5