

Factor	Estimation of factor	Estimation of uncertainty
<i>R</i>	<b>(a)</b> $R = (79 + 0.363 \times r) \times 9.8$ (Babu et al., 1978)	<b>(b)</b> $\delta R = 3.558 \times \delta r$
<i>K</i>	<b>(c)</b> $100 K = 2.1 \times 10^{-4} \times (12\text{-OM}) \times M^{1.14} + 3.25 \times (\text{sc}-2) + 2.5 \times (p-3)$ (Wischmeier and Smith, 1978)	$\delta K = \text{Calculated}-\text{Measured} = 0.0026$ (65 % confidence interval) (Wischmeier and Smith, 1978)
<i>L</i>	<b>(d)</b> $L = \frac{(\lambda_{i-1} + D)^{m+1} - (\lambda_{i-1})^{m+1}}{D(22.13)^m}$ (Wischmeier and Smith, 1978; Desmet and Govers, 1996)	<b>(e)</b> $\frac{\delta L}{L} = \sqrt{\left(\frac{m}{\Delta x} \delta \Delta x\right)^2 + (\ln(m+1) \delta m)^2}$ where, $\delta m = \frac{\Delta m}{2\sqrt{6}}$ (triangular distribution)
<i>S</i>	<b>(f)</b> $S = 10.8 \times \sin \theta + 0.03$ for slope < 9 %; $S = 16.8 \times \sin \theta - 0.05$ for slope < 9 % (McCool et al., 1987)	<b>(g)</b> $\delta S = 10.8 \times \cos \theta \times \delta \theta$ slope < 9 % , $\delta S = 16.8 \times \cos \theta \times \delta \theta$ slope < 9% <b>(h)</b> $\delta \theta = \sqrt{\left(\frac{\frac{\delta \Delta h}{\Delta x \times \left(1 + \left(\frac{\Delta h}{\Delta x}\right)^2}\right)}{\right)^2 + \left(\frac{-\delta \Delta x}{\Delta h \times \left(1 + \left(\frac{\Delta x}{\Delta h}\right)^2}\right)}\right)^2}$
<i>C</i>	Reference tables (Morgan, 2009; FAO, 1978)	<b>(i)</b> $\delta C = \frac{\Delta C}{2\sqrt{6}}$ (triangular distribution)
<i>P</i>		<b>(j)</b> $\delta P = \frac{\Delta P}{2\sqrt{6}}$ (triangular distribution) (JCGM, 2008)
SDR	<b>(k)</b> $\text{SDR} = 1.42 \times A^{-0.132}$ (Sharda and Ojasvi, 2016)	<b>(l)</b> $\delta \text{SDR}_{\text{model}} = \sqrt{(\exp(\text{se}^2) - 1) \times \exp(2 \ln(\text{SDR}) + \text{se}^2)}$ where, SE = standard error (0.048) <b>(m)</b> $\delta \text{SDR}_{\text{input data}} = 0.18 \times A^{-1.132} \times \delta A$ where $\delta A = n \times 2 \Delta x \times \delta \Delta x$ <b>(n)</b> $\delta \text{SDR} = \sqrt{(\delta \text{SDR}_{\text{model}})^2 + (\delta \text{SDR}_{\text{input data}})^2}$