Surface cover Modification Using Rock Fragments (SMURF)

Rock cover (percent)	Crop Residue (percent)										
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
0%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
10%	10%	19%	28%	37%	46%	55%	64%	73%	82%	91%	100%
20%	20%	28%	36%	44%	52%	60%	68%	76%	84%	92%	100%
30%	30%	37%	44%	51%	58%	65%	72%	79%	86%	93%	100%
40%	40%	46%	52%	58%	64%	70%	76%	82%	88%	94%	100%
50%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
60%	60%	64%	68%	72%	76%	80%	84%	88%	92%	96%	100%
70%	70%	73%	76%	79%	82%	85%	88%	91%	94%	97%	100%
80%	80%	82%	84%	86%	88%	90%	92%	94%	96%	98%	100%
90%	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

<10% Clean till

10-30% Low residue

30-50% Moderate residue

>50% High residue

Cr + (Rc - (Cr x Rc)) = SMURF

Crop residue = Cr

Rock cover = Rc