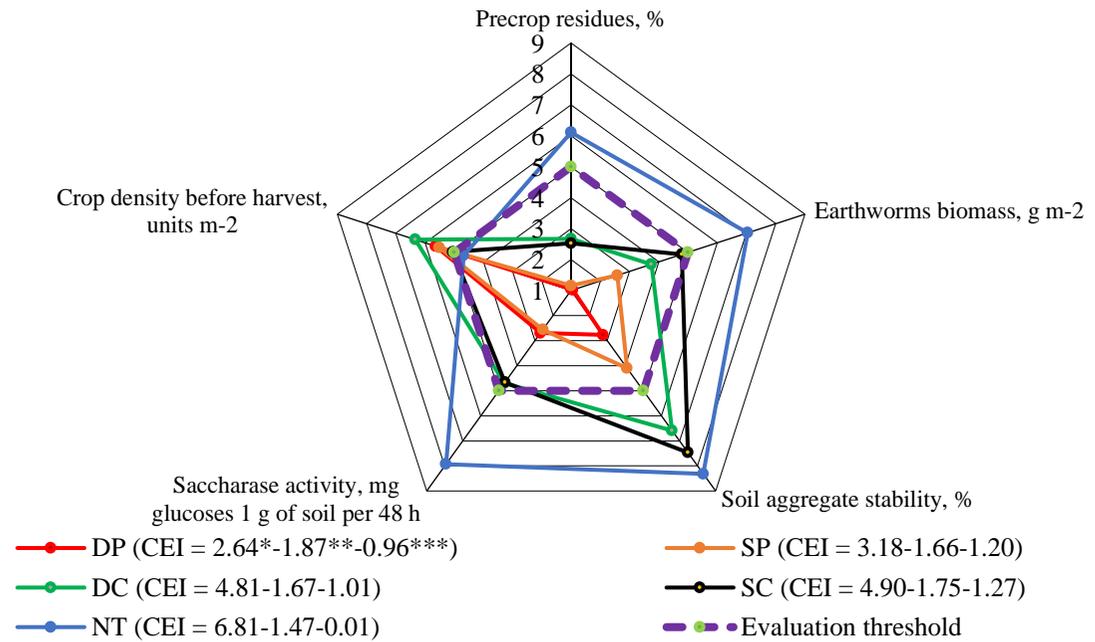


Table S1. Example of CEI calculations of Level 1: Soil aggregate stability, divided into the stages

Stage	Example																																																		
<p>1) The values of the different indicators are determined (for example, volume precrop residues). Exell platform was used.</p>	<p style="text-align: center;">1) The values of the different indicators were determined</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="7" style="background-color: #c6e0b4;">I Soil aggregate stability</th> </tr> <tr> <th>Treatmens</th> <th>DP</th> <th>SP</th> <th>DC</th> <th>SC</th> <th>NT</th> <th></th> </tr> <tr> <th>Year</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Precrop residues (after sowing), %</td> <td></td> <td style="background-color: #4f81bd;"></td> <td style="background-color: #4f81bd;"></td> <td></td> <td></td> <td style="background-color: #c00000;"></td> </tr> <tr> <td></td> <td>2016</td> <td>0,5</td> <td style="background-color: #4f81bd;">0,3</td> <td>8,5</td> <td>10,5</td> <td style="background-color: #c00000;">82,8</td> </tr> <tr> <td></td> <td>2017</td> <td>1,3</td> <td style="background-color: #4f81bd;">1,3</td> <td>7,3</td> <td>11,8</td> <td>22</td> </tr> <tr> <td></td> <td>2018</td> <td>0,8</td> <td style="background-color: #4f81bd;">4,2</td> <td>36,8</td> <td>25,8</td> <td>54,2</td> </tr> </tbody> </table>	I Soil aggregate stability							Treatmens	DP	SP	DC	SC	NT		Year							Precrop residues (after sowing), %								2016	0,5	0,3	8,5	10,5	82,8		2017	1,3	1,3	7,3	11,8	22		2018	0,8	4,2	36,8	25,8	54,2	
I Soil aggregate stability																																																			
Treatmens	DP	SP	DC	SC	NT																																														
Year																																																			
Precrop residues (after sowing), %																																																			
	2016	0,5	0,3	8,5	10,5	82,8																																													
	2017	1,3	1,3	7,3	11,8	22																																													
	2018	0,8	4,2	36,8	25,8	54,2																																													
<p>2) The real values of each indicator are converted to a uniform 9-point scale. A score of 1 corresponds to the worst or minimum value, and 9 – to the best or highest value. For all other values of the same indicator, the scores are calculated according to the following formula: $VB_i = (X_i - X_{min}) / (X_{max} - X_{min}) \times 8 + 1$ where: VB_i is the score for a value of a given indicator, X_i is the expression for a given value, X_{max} is the maximum value for a given indicator, X_{min} is the minimum value for a given indicator. Exell platform was used.</p>	<p style="text-align: center;">2) The real values of each indicator were converted to a uniform 9-point scale</p> <p style="text-align: center;">=(0,5-0,3)/(82,8-0,3)*8+1</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>K</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>Formula</td> <td>1,02</td> <td style="background-color: #ffff00;">1</td> <td>1,8</td> <td>2</td> <td style="background-color: #ffff00;">9</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>1,1</td> <td>1,1</td> <td>1,68</td> <td>2,12</td> <td>3,1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>1,05</td> <td>1,38</td> <td>4,54</td> <td>3,47</td> <td>6,23</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Average</td> <td style="background-color: #c6e0b4;">1,06</td> <td style="background-color: #c6e0b4;">1,16</td> <td style="background-color: #c6e0b4;">2,67</td> <td style="background-color: #c6e0b4;">2,53</td> <td style="background-color: #c6e0b4;">6,11</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		D	E	F	G	H	I	J	K	L	Formula	1,02	1	1,8	2	9						1,1	1,1	1,68	2,12	3,1						1,05	1,38	4,54	3,47	6,23					Average	1,06	1,16	2,67	2,53	6,11				
	D	E	F	G	H	I	J	K	L																																										
Formula	1,02	1	1,8	2	9																																														
	1,1	1,1	1,68	2,12	3,1																																														
	1,05	1,38	4,54	3,47	6,23																																														
Average	1,06	1,16	2,67	2,53	6,11																																														

3) The indicators converted to scores are shown in grid diagrams with a radius from 1 to 9. Exell platform was used.



4) The scale also shows the average value of the individual indicators – the score threshold – which is equal to 5 points, and which distinguishes between the high and the low scores. The effectiveness of the measure (marked with *) is indicated by the area bounded by the scores of all its indicators. CEI data was calculated in Stage 5.

	DP (CEI = 2.64*-1.87**-0.96***)	SP (CEI = 3.18-1.66-1.20)	DC (CEI = 4.81-1.67-1.01)	SC (CEI = 4.90-1.75-1.27)	NT (CEI = 6.81-1.47-0.01)	Evaluation threshold
Precrop residues, %	1.06	1.16	2.67	2.53	6.11	5.00
Earthworms' biomass, g m ⁻²	1.06	2.59	3.75	4.79	7.04	5.00
Soil aggregate stability, %	2.77	4.10	6.59	7.47	8.32	5.00
Saccharase activity, mg glucoses 1 g of soil per 48 h	2.69	2.56	4.70	4.66	7.93	5.00
Crop density before harvest, units m ⁻²	5.63	5.51	6.33	5.05	4.68	5.00

5) The calculation of the complex evaluation index (CEI), which consists of the average of the evaluation scores (*-EP), the standard deviation of the evaluation scores (**-EP) and the standard deviation of the average of the evaluation scores below the evaluation threshold (***)).

CEI and EP calculations were performed by the computer program STAT_ENG in SELEKCIJA software (vers. 5.00, author dr. Pavelas Tarakanovas, Lithuanian Institute of Agriculture, Akademija, Kedainiu distr., Lithuania) was applied. This data was included in the figure legend.

The screenshot shows the main interface of the STAT_ENG software. At the top, there is a title bar and a menu. Below that, there is a section for 'T test for means from one trial' with the program name 'PROGRAMME STAT_ENG for EXCEL vers. 1.55' and author 'Lithuanija, LIA, 2002, Author Dr. P. Tarakanovas'. There are several buttons: 'To Prepare a Form', 'Saving in a hard disk', 'Reading from a hard disk', and 'To Execute Analysis'. Below this is a table titled 'OBSERVATIONS' with columns for characteristics and 10 observation points. The data is as follows:

Characteristics	1	2	3	4	5	6	7	8	9	10
1.DP	1,0566667	1,06	2,766667	2,689769	5,632184					
2.SP	1,16	2,585132	4,1	2,557756	5,505747					
3.DC	2,6733333	3,745803	6,59	4,69637	6,333333					
4.SC	2,53	4,788969	7,466667	4,661166	5,045977					
5.NT	6,11	7,043165	8,316667	7,926293	4,678161					

The results of a statistical analysis

Crop -
Investigation -
Site and year of investigation -
Investigation executor -

Table 1. A basic statistical analysis of characteristics.

Name of character.	Mean	Standart Error	Standart Error. %	Min.	Max.	SD	Variation coef. %	Authentic interval from	to
1.DP	2,64	0,84	31,65	1,06	5,63	1,87	70,77	0,32	4,96
2.SP	3,18	0,74	23,39	1,16	5,51	1,66	52,30	1,12	5,25
3.DC	4,81	0,75	15,56	2,67	6,59	1,67	34,80	2,73	6,89
4.SC	4,90	0,78	16,01	2,53	7,47	1,75	35,79	2,72	7,08
5.NT	6,81	0,66	9,63	4,68	8,32	1,47	21,52	4,99	8,64

Calculate: 2024y. January 16d. 16 h. 54 m.
Programme * STAT_ENG for EXCEL vers. 1.55 *, Author - Dr. Pavelas Tarakanovas.
Lithuanija, Kedainiu distr., Akademija, LIA, tel.: 370 57 37 179
It is necessary to point out the programme name when data are publishing!

The results of a statistical analysis

Crop -
Investigation -
Site and year of investigation -
Investigation executor -

Table 1. A basic statistical analysis of characteristics.

Name of character.	Mean	Standart Error	Standart Error. %	Min.	Max.	SD	Variation coef. %	Authentic interval from	to
1.DP	1,89	0,48	25,47	1,06	2,77	0,96	50,95	0,36	3,43
2.SP	2,60	0,60	23,09	1,16	4,10	1,20	46,17	0,69	4,51
3.DC	3,71	0,58	15,77	2,67	4,70	1,01	27,32	1,19	6,22
4.SC	3,99	0,73	18,35	2,53	4,79	1,27	31,78	0,84	7,15