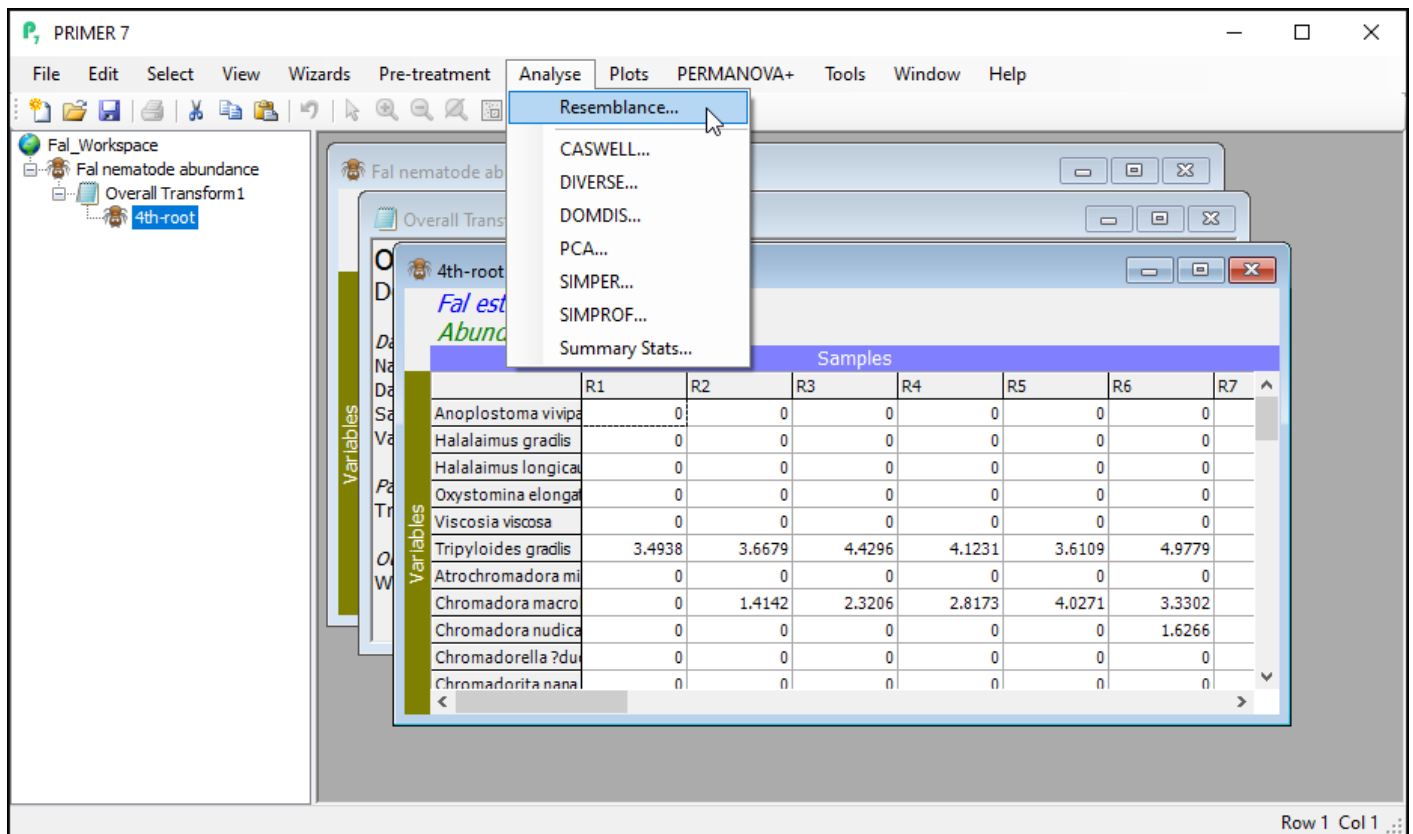


Step 2: Resemblance

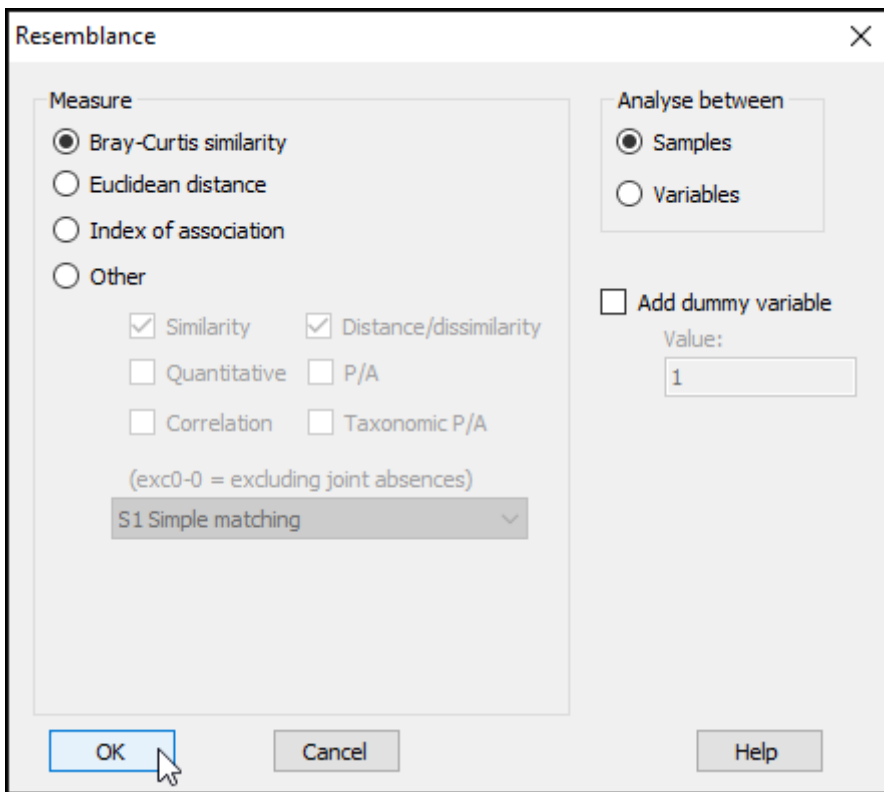
For a description of the Bray-Curtis resemblance measure and the rationale for its use with biotic data, see [Clarke et al. \(2006\)](#) and [Chapter 2](#) in '*Change in Marine Communities*'.

1. With the data sheet named '4th-root' from the previous step as the active window, click on **Analyse > Resemblance...**



This dialog has a host of choices for you to consider, which you can uncover by clicking on the 'Other' radio button. See [Clarke et al. \(2006\)](#) and chapter 7 in [Legendre & Legendre \(2012\)](#) for more details regarding the available choices here. For this example, however, we are going to use the Bray-Curtis resemblance measure. (This is the default for data of type 'Abundance').

2. In the 'Resemblance' dialog, under 'Measure', click on ☒ Bray-Curtis similarity (the default), then click **OK**.



You will see the resulting (lower triangular form of the) matrix of Bray-Curtis similarities between every pair of samples (called 'Resem1').

PRIMER 7

File Edit Select View Analyse PERMANOVA+ Tools Window Help

Fal_Workspace

- Fal nematode abundance
- Overall Transform1
- 4th-root
- Resemblance1
- Resem1

Resem1

Fal estuary nematodes
Similarity (0 to 100)

	Samples														
	R1	R2	R3	R4	R5	R6	R7	M1	M2	M3	M4	M5	P1	P2	P3
R1															
R2	64.982														
R3	53.833	67.005													
R4	53.602	78.516	83.701												
R5	54.444	61.138	77.211	78.462											
R6	51.61	60.184	76.57	77.119	79.357										
R7	43.462	55.112	66.678	67.859	70.821	74.032									
M1	40.004	52.708	38.665	46.935	41.623	43.638	39.71								
M2	43.811	49.494	52.47	56.677	57.561	58.843	54.027								
M3	32.397	37.747	29.797	39.536	32.493	40.112	32.463								
M4	36.844	46.684	47.671	56.551	53.946	59.747	53.01								
M5	40.491	44.13	38.527	48.595	41.647	44.155	40.729								
P1	29.593	42.889	45.549	49.238	44.34	49.873	43.439								
P2	33.267	47.414	51.927	55.219	52.441	57.512	49.872								
P3	31.531	40.719	39.818	44.122	40.254	46.193	43.476								

Notice that this will inherit relevant properties and also factors that were associated with the dataset from which it was generated. From the 'Resem1' matrix as the active window, click on **Edit** > **Properties** to see the properties associated with this resemblance matrix (shown below); you can also click on **Edit** > **Factors** to see the factors (which have not changed).

Resemblance Matrix Properties

Title:
Fal estuary nematodes

Resemblance type

☒ Similarity

☐ Dissimilarity

☐ Distance

☐ Distance^2

☐ Correlation

☐ R

☐ Rank

Between

☒ Samples

☐ Variables

☐ Other

History:

Transform: Fourth root
Resemblance: S17 Bray-Curtis similarity

Number of row/columns: 27

Description:

Abundance of nematodes (counts from identifications in a random sub-sample multiplied up by total nematode count for each sample, so has the statistical properties of density rather than pure count).
Data from meiofauna cores of the sediments of 27 sites over 5

OK Cancel Help

- It is (once again) good practice to re-name the sheet containing the resulting resemblance matrix (currently called 'Resem1') something that would be more useful for future reference. Click on the 'Resem1' sheet, then click on **File > Rename Resem** and call it 'BC_4th-root' for clarity in ensuing analyses.

PRIMER 7

File Edit Select View Analyse PERMANOVA+ Tools Window Help

New... Ctrl+N
Open... Ctrl+O
Undo Workspace
Close Workspace
Save Workspace Ctrl+S
Save Workspace As...
Save Resem As...
Rename Workspace...
Rename Resem F2
Delete Resem
Recent Workspaces
Recent Items
Exit

Resem1

Fal estuary nematodes
Similarity (0 to 100)

	R1	R2	R3	R4	R5	R6	R7
R1							
R2	64.982						
R3	53.833	67.005					
R4	53.602	78.516	83.701				
R5	54.444	61.138	77.211	78.462			
R6	51.61	60.184	76.57	77.119	79.357		
R7	43.462	55.112	66.678	67.859	70.821	74.032	
M1	40.004	52.708	38.665	46.935	41.623	43.638	39.
M2	43.811	49.494	52.47	56.677	57.561	58.843	54.0
M3	32.397	37.747	29.797	39.536	32.493	40.112	32.4
M4	36.844	46.684	47.671	56.551	53.946	59.747	53.
M5	40.491	44.13	38.527	48.595	41.647	44.155	40.7
P1	29.593	42.889	45.549	49.238	44.34	49.873	43.4
P2	33.267	47.414	51.977	55.219	52.441	57.517	49.8

Row 1 Col 1

PRIMER

Rename

BC_4th-root

OK Cancel Help

Revision #21

Created 13 February 2024 03:50:09 by Marti

Updated 12 March 2025 01:12:19 by Abby Miller