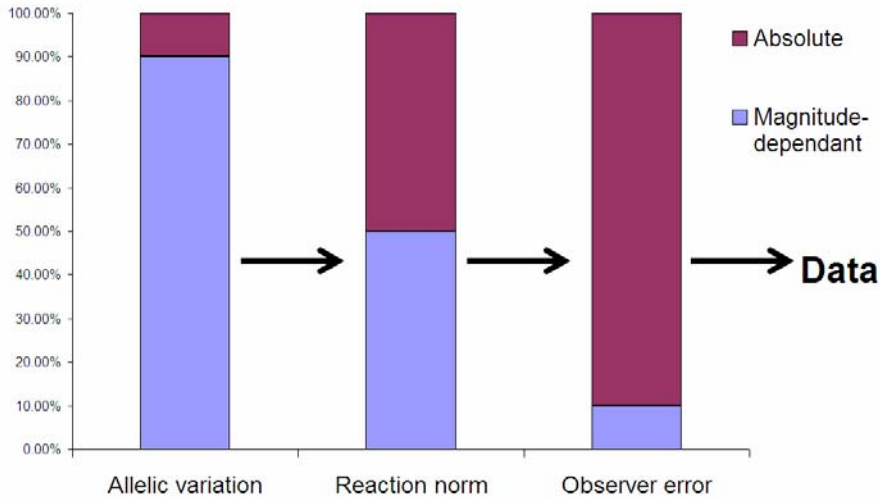


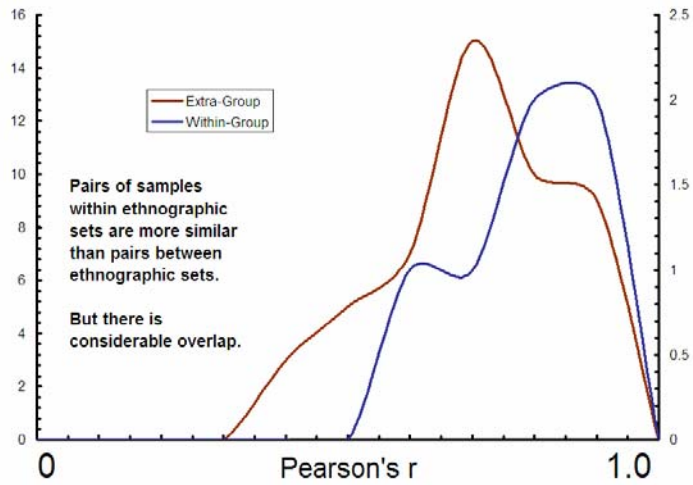
## Magnitude-dependant vs. Absolute contribution to variability in observed trait data



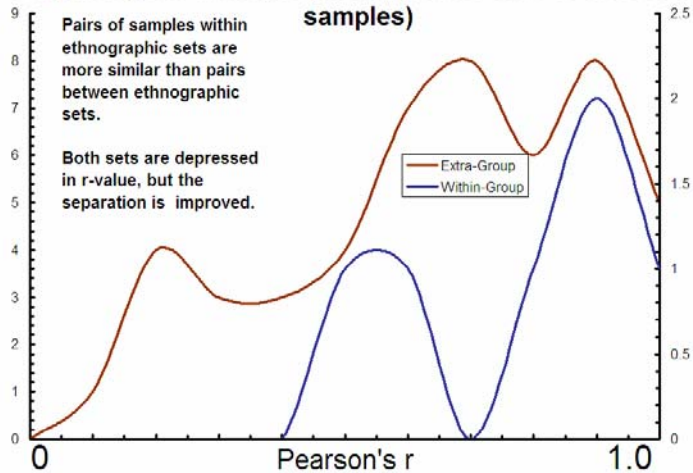
**Example correlation analysis. Yellow marks the correlations between different samples WITHIN a variety. Non-colored values are correlations BETWEEN varieties.**

|                            | MARAMB<br>UMaty | BORUCA<br>BROWN2<br>borbr2 | BORUCA<br>BROWN<br>3borbr3 | BORUCA<br>BROWNb<br>orbr1 | BRI<br>BRIYELL<br>OWbrly1 | BRI<br>BRIYELL<br>OW<br>2brly2 | TALAMA<br>NCatala<br>manca1 | TALAMA<br>NCA<br>3Talama<br>nca3 | MATANA<br>BUPURP<br>LEMatPu<br>r1 | MATANB<br>UPURPL<br>E<br>3MatPur3 | YAXUN<br>ANAL<br>TELSH<br>ORTYx<br>NalTel |
|----------------------------|-----------------|----------------------------|----------------------------|---------------------------|---------------------------|--------------------------------|-----------------------------|----------------------------------|-----------------------------------|-----------------------------------|---|
| MARAMBUMaty                | 1               |                            |                            |                           |                           |                                |                             |                                  |                                   |                                   |   |
| BORUCABROWN2borbr2         | 0.441819        | 1                          |                            |                           |                           |                                |                             |                                  |                                   |                                   |   |
| BORUCABROWN 3borbr3        | 0.483201        | 0.826879                   | 1                          |                           |                           |                                |                             |                                  |                                   |                                   |   |
| BORUCABROWNborbr1          | 0.631711        | 0.598267                   | 0.667084                   | 1                         |                           |                                |                             |                                  |                                   |                                   |   |
| BRI BRIYELLOWbrly1         | 0.777376        | 0.360751                   | 0.545056                   | 0.561239                  | 1                         |                                |                             |                                  |                                   |                                   |   |
| BRI BRIYELLOW 2brly2       | 0.637922        | 0.632593                   | 0.843682                   | 0.688574                  | 0.833649                  | 1                              |                             |                                  |                                   |                                   |   |
| TALAMANCAatalamanca1       | 0.743092        | 0.314217                   | 0.475566                   | 0.546061                  | 0.7213                    | 0.60201                        | 1                           |                                  |                                   |                                   |   |
| TALAMANCA 3Talamanca3      | 0.627737        | 0.593968                   | 0.765657                   | 0.654784                  | 0.642775                  | 0.759301                       | 0.783638                    | 1                                |                                   |                                   |   |
| MATANABUPURPLEMatPur1      | 0.776964        | 0.432178                   | 0.558509                   | 0.615051                  | 0.644284                  | 0.55511                        | 0.766363                    | 0.704242                         | 1                                 |                                   |   |
| MATANBUPURPLE 3MatPur3     | 0.729202        | 0.372251                   | 0.644551                   | 0.642233                  | 0.833216                  | 0.801706                       | 0.83865                     | 0.854265                         | 0.75299                           | 1                                 |   |
| YAXUNANAL TELSHORTYxNalTel | 0.871407        | 0.438247                   | 0.528924                   | 0.638216                  | 0.853776                  | 0.692047                       | 0.758267                    | 0.6465                           | 0.808863                          | 0.823684                          | 1   |

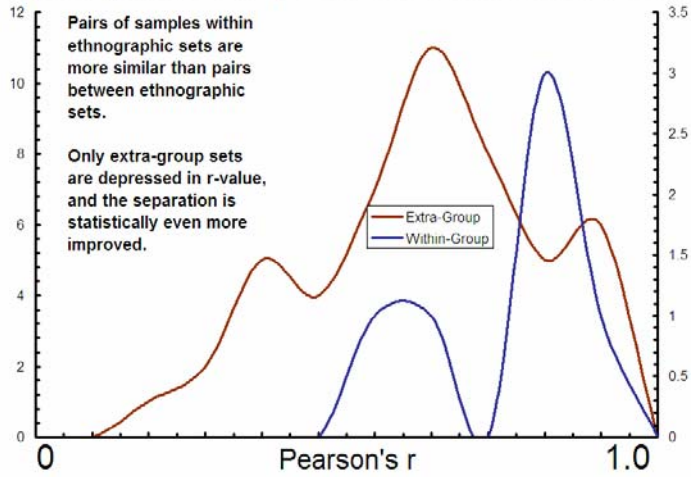
### Within and Extra-group correlations of all morphological traits



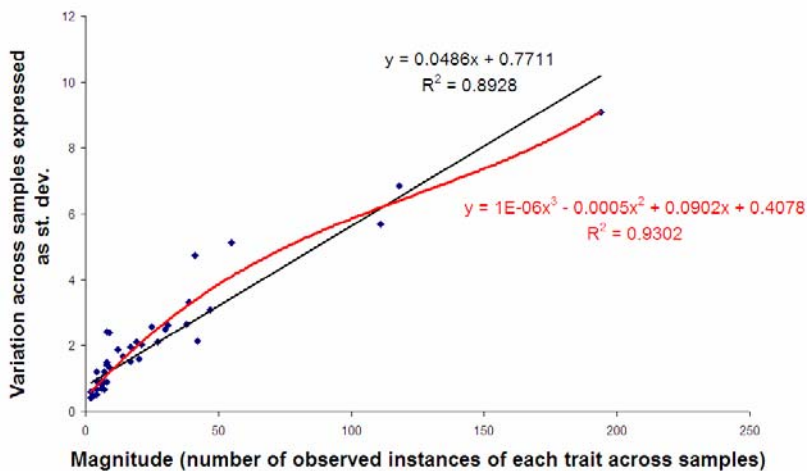
### Within and Extra-group correlations of selected morphological traits (frequency greater than 10 across all samples)



### Within and Extra-group correlations of selected morphological traits (Top 30 in variation measured as st.dev.)



### Comparison of two regressin models for the study samples, used to derive residuals.



**Within and Extra-group correlations of selected morphological traits (more than one observation, positive residuals from frequency-variance regression analysis)**

