

# Appendix L

Data SubSet A-- Analysis for 152 points of 20 variables:

| FACTOR | OM     | C:N    | TKN%  | Phos  | K     | Cu      | Fe      | Zn       |  | Fecal   | Density | Moist  |
|--------|--------|--------|-------|-------|-------|---------|---------|----------|--|---------|---------|--------|
| MIN    | 15.800 | 3.100  | 0.511 | 0.104 | 0.141 | 12.800  | 45.400  | 89.000   |  | 1.000   | 24.000  | 14.100 |
| MAX    | 83.700 | 25.500 | 8.255 | 2.515 | 3.212 | 1076.00 | 17106   | 1660.000 |  | 65001.  | 69.000  | 85.500 |
| MEAN   | 42.202 | 12.951 | 2.075 | 0.610 | 0.972 | 171.284 | 6645.97 | 264.087  |  | 2206.96 | 47.276  | 54.815 |
| SD     | 17.261 | 4.182  | 1.510 | 0.571 | 0.702 | 239.826 | 4663.76 | 239.535  |  | 9072.28 | 8.524   | 15.581 |

| FACTOR | pH    | C03   | mmhos  | Germ    | Wgt     | weeds   | CO2 Sol |  | NH3-Sol |  | Index |
|--------|-------|-------|--------|---------|---------|---------|---------|--|---------|--|-------|
| MIN    | 6.230 | 1.000 | 0.200  | 5.000   | 9.000   | 0.000   | 3.000   |  | 1.000   |  | 1.000 |
| MAX    | 9.280 | 3.000 | 26.000 | 111.000 | 133.000 | 227.000 | 8.000   |  | 5.000   |  | 8.000 |
| MEAN   | 7.859 | 2.513 | 6.118  | 91.625  | 78.211  | 8.599   | 6.066   |  | 4.572   |  | 5.829 |
| SD     | 0.593 | 0.609 | 5.585  | 20.788  | 26.136  | 26.467  | 1.001   |  | 1.020   |  | 1.228 |

## CORRELATION MATRIX:

|                |           |            |             |             |          |           |           |           |              |                |              |  |
|----------------|-----------|------------|-------------|-------------|----------|-----------|-----------|-----------|--------------|----------------|--------------|--|
| <b>OM</b>      | 1.000     |            |             |             |          |           |           |           |              |                |              |  |
| <b>C:N</b>     | 0.001     | 1.000      |             |             |          |           |           |           |              |                |              |  |
| <b>TKN%</b>    | 0.541     | -0.650     | 1.000       |             |          |           |           |           |              |                |              |  |
| <b>Phos</b>    | 0.088     | -0.588     | 0.608       | 1.000       |          |           |           |           |              |                |              |  |
| <b>K</b>       | 0.407     | -0.491     | 0.658       | 0.777       | 1.000    |           |           |           |              |                |              |  |
| <b>Cu</b>      | 0.538     | 0.056      | 0.144       | -0.245      | -0.076   | 1.000     |           |           |              |                |              |  |
| <b>Fe</b>      | -0.705    | 0.264      | -0.594      | -0.439      | -0.612   | -0.451    | 1.000     |           |              |                |              |  |
| <b>Zn</b>      | 0.335     | -0.251     | 0.361       | 0.366       | 0.374    | 0.362     | -0.536    | 1.000     |              |                |              |  |
| <b>Fecal</b>   | 0.101     | -0.026     | 0.006       | -0.028      | 0.028    | -0.066    | -0.111    | -0.016    | 1.000        |                |              |  |
| <b>Density</b> | -0.518    | 0.210      | -0.494      | -0.220      | -0.215   | -0.387    | 0.391     | -0.160    | -0.113       | 1.000          |              |  |
| <b>Moist</b>   | 0.544     | 0.498      | -0.232      | -0.578      | -0.257   | 0.397     | -0.129    | -0.038    | 0.105        | 0.118          | 1.000        |  |
| <b>pH</b>      | 0.350     | -0.165     | 0.391       | 0.398       | 0.634    | 0.086     | -0.523    | 0.319     | 0.052        | -0.215         | -0.059       |  |
| <b>C03</b>     | 0.154     | -0.123     | 0.241       | 0.333       | 0.283    | 0.106     | -0.428    | 0.250     | 0.161        | 0.018          | -0.091       |  |
| <b>mmhos</b>   | 0.018     | -0.632     | 0.585       | 0.852       | 0.821    | -0.245    | -0.439    | 0.329     | -0.052       | -0.153         | -0.620       |  |
| <b>Germ</b>    | -0.126    | 0.529      | -0.698      | -0.667      | -0.606   | 0.104     | 0.364     | -0.280    | 0.083        | 0.181          | 0.493        |  |
| <b>Wgt</b>     | -0.138    | 0.421      | -0.608      | -0.617      | -0.643   | 0.127     | 0.315     | -0.257    | -0.065       | 0.132          | 0.373        |  |
| <b>weeds</b>   | -0.059    | 0.014      | -0.089      | -0.144      | -0.217   | 0.304     | 0.025     | -0.070    | -0.036       | -0.080         | 0.046        |  |
| <b>CO2-Sol</b> | -0.266    | 0.049      | -0.212      | -0.030      | -0.130   | -0.195    | 0.218     | -0.225    | -0.217       | 0.245          | -0.066       |  |
| <b>NH3-Sol</b> | -0.178    | 0.535      | -0.735      | -0.729      | -0.681   | 0.112     | 0.435     | -0.418    | 0.102        | 0.292          | 0.526        |  |
| <b>Index</b>   | -0.306    | 0.325      | -0.575      | -0.396      | -0.435   | -0.095    | 0.386     | -0.374    | -0.130       | 0.368          | 0.218        |  |
| <b>FACTOR</b>  | <b>OM</b> | <b>C:N</b> | <b>TKN%</b> | <b>Phos</b> | <b>K</b> | <b>Cu</b> | <b>Fe</b> | <b>Zn</b> | <b>Fecal</b> | <b>Density</b> | <b>Moist</b> |  |

|                |           |            |              |             |            |              |                |                |              |  |  |  |
|----------------|-----------|------------|--------------|-------------|------------|--------------|----------------|----------------|--------------|--|--|--|
| <b>pH</b>      | 1.000     |            |              |             |            |              |                |                |              |  |  |  |
| <b>C03</b>     | 0.393     | 1.000      |              |             |            |              |                |                |              |  |  |  |
| <b>mmhos</b>   | 0.426     | 0.267      | 1.000        |             |            |              |                |                |              |  |  |  |
| <b>Germ</b>    | -0.333    | -0.174     | -0.649       | 1.000       |            |              |                |                |              |  |  |  |
| <b>Wgt</b>     | -0.492    | -0.300     | -0.584       | 0.699       | 1.000      |              |                |                |              |  |  |  |
| <b>weeds</b>   | -0.102    | 0.046      | -0.165       | 0.069       | 0.144      | 1.000        |                |                |              |  |  |  |
| <b>CO2-Sol</b> | -0.166    | -0.023     | -0.028       | 0.214       | 0.264      | -0.062       | 1.000          |                |              |  |  |  |
| <b>NH3-Sol</b> | -0.535    | -0.263     | -0.751       | 0.695       | 0.682      | 0.125        | 0.047          | 1.000          |              |  |  |  |
| <b>Index</b>   | -0.384    | -0.148     | -0.403       | 0.534       | 0.568      | 0.008        | 0.839          | 0.549          | 1.000        |  |  |  |
| <b>FACTOR</b>  | <b>pH</b> | <b>C03</b> | <b>mmhos</b> | <b>Germ</b> | <b>Wgt</b> | <b>weeds</b> | <b>CO2 Sol</b> | <b>NH3-Sol</b> | <b>Index</b> |  |  |  |

note r > 0.50 <p0.0001