

|           |                 | Lacombe     |                  | Lethbridge  |                  | Vauxhall    |                  |
|-----------|-----------------|-------------|------------------|-------------|------------------|-------------|------------------|
|           |                 | Correlation | P-Value          | Correlation | P-Value          | Correlation | P-Value          |
| NDF       | DMD             | -0.271      | <b>0.008</b>     | -0.457      | <b>&lt;0.001</b> | -0.670      | <b>&lt;0.001</b> |
| NDF       | NDFD            | -0.207      | <b>0.044</b>     | -0.141      | 0.179            | -0.455      | <b>&lt;0.001</b> |
| DMD       | NDFD            | 0.656       | <b>&lt;0.001</b> | 0.234       | <b>0.024</b>     | 0.779       | <b>&lt;0.001</b> |
| NDF       | CP              | 0.028       | 0.790            | -0.029      | 0.783            | 0.063       | 0.544            |
| DMD       | CP              | -0.374      | <b>&lt;0.001</b> | -0.113      | 0.279            | -0.250      | <b>0.015</b>     |
| NDFD      | CP              | -0.042      | 0.687            | 0.029       | 0.780            | -0.017      | 0.870            |
| NDF       | ADF             | 0.726       | <b>&lt;0.001</b> | 0.795       | <b>&lt;0.001</b> | 0.855       | <b>&lt;0.001</b> |
| DMD       | ADF             | -0.230      | <b>0.025</b>     | -0.387      | <b>&lt;0.001</b> | -0.727      | <b>&lt;0.001</b> |
| NDFD      | ADF             | -0.176      | 0.088            | -0.371      | <b>&lt;0.001</b> | -0.553      | <b>&lt;0.001</b> |
| CP        | ADF             | -0.115      | 0.265            | 0.092       | 0.381            | 0.056       | 0.587            |
| NDF       | ADL             | 0.539       | <b>&lt;0.001</b> | 0.427       | <b>&lt;0.001</b> | 0.774       | <b>&lt;0.001</b> |
| DMD       | ADL             | -0.416      | <b>&lt;0.001</b> | 0.023       | 0.825            | -0.760      | <b>&lt;0.001</b> |
| NDFD      | ADL             | -0.200      | 0.052            | -0.478      | <b>&lt;0.001</b> | -0.649      | <b>&lt;0.001</b> |
| CP        | ADL             | 0.197       | 0.056            | -0.070      | 0.505            | 0.116       | 0.264            |
| ADF       | ADL             | 0.748       | <b>&lt;0.001</b> | 0.616       | <b>&lt;0.001</b> | 0.910       | <b>&lt;0.001</b> |
| NDF       | Starch          | -0.533      | <b>&lt;0.001</b> | -0.538      | <b>&lt;0.001</b> | -0.610      | <b>&lt;0.001</b> |
| DMD       | Starch          | 0.119       | 0.251            | 0.339       | <b>&lt;0.001</b> | 0.758       | <b>&lt;0.001</b> |
| NDFD      | Starch          | 0.126       | 0.225            | 0.043       | 0.683            | 0.465       | <b>&lt;0.001</b> |
| CP        | Starch          | 0.256       | <b>0.012</b>     | 0.053       | 0.613            | -0.292      | <b>0.004</b>     |
| ADF       | Starch          | -0.882      | <b>&lt;0.001</b> | -0.742      | <b>&lt;0.001</b> | -0.786      | <b>&lt;0.001</b> |
| ADL       | Starch          | -0.498      | <b>&lt;0.001</b> | -0.342      | <b>&lt;0.001</b> | -0.657      | <b>&lt;0.001</b> |
| NDF       | Kernel DM       | -0.242      | <b>0.018</b>     | 0.433       | <b>&lt;0.001</b> | 0.159       | 0.124            |
| DMD       | Kernel DM       | 0.181       | 0.079            | -0.160      | 0.126            | 0.057       | 0.581            |
| NDFD      | Kernel DM       | 0.096       | 0.354            | -0.108      | 0.304            | 0.019       | 0.858            |
| CP        | Kernel DM       | 0.045       | 0.666            | -0.258      | <b>0.012</b>     | -0.400      | <b>&lt;0.001</b> |
| ADF       | Kernel DM       | -0.599      | <b>&lt;0.001</b> | 0.245       | <b>0.018</b>     | 0.126       | 0.222            |
| ADL       | Kernel DM       | -0.364      | <b>&lt;0.001</b> | 0.226       | <b>0.029</b>     | 0.159       | 0.123            |
| Starch    | Kernel DM       | 0.759       | <b>&lt;0.001</b> | -0.056      | 0.596            | 0.264       | <b>0.010</b>     |
| NDF       | Kernel hardness | -0.319      | <b>0.002</b>     | -0.015      | 0.887            | 0.351       | <b>&lt;0.001</b> |
| DMD       | Kernel hardness | 0.151       | 0.145            | -0.144      | 0.169            | -0.663      | <b>&lt;0.001</b> |
| NDFD      | Kernel hardness | 0.159       | 0.124            | 0.212       | <b>0.042</b>     | -0.316      | <b>0.002</b>     |
| CP        | Kernel hardness | 0.322       | <b>0.001</b>     | 0.278       | <b>0.007</b>     | 0.418       | <b>&lt;0.001</b> |
| ADF       | Kernel hardness | -0.609      | <b>&lt;0.001</b> | -0.130      | 0.214            | 0.394       | <b>&lt;0.001</b> |
| ADL       | Kernel hardness | -0.367      | <b>&lt;0.001</b> | -0.306      | <b>0.003</b>     | 0.433       | <b>&lt;0.001</b> |
| Starch    | Kernel hardness | 0.754       | <b>&lt;0.001</b> | 0.134       | 0.200            | -0.518      | <b>&lt;0.001</b> |
| Kernel DM | Kernel hardness | 0.767       | <b>&lt;0.001</b> | 0.272       | <b>0.008</b>     | -0.016      | 0.879            |
| NDF       | Kernel density  | -0.634      | <b>&lt;0.001</b> | 0.122       | 0.246            | 0.093       | 0.368            |
| DMD       | Kernel density  | -0.114      | 0.270            | -0.368      | <b>&lt;0.001</b> | -0.292      | <b>0.004</b>     |
| NDFD      | Kernel density  | 0.189       | 0.067            | 0.148       | 0.156            | -0.211      | <b>0.040</b>     |
| CP        | Kernel density  | 0.391       | <b>&lt;0.001</b> | 0.049       | 0.644            | 0.220       | <b>0.032</b>     |
| ADF       | Kernel density  | -0.665      | <b>&lt;0.001</b> | -0.115      | 0.271            | 0.095       | 0.359            |
| ADL       | Kernel density  | -0.261      | <b>0.011</b>     | -0.397      | <b>&lt;0.001</b> | 0.167       | 0.107            |
| Starch    | Kernel density  | 0.699       | <b>&lt;0.001</b> | 0.061       | 0.563            | -0.169      | 0.101            |

|                 |                |        |                  |        |                  |        |                  |
|-----------------|----------------|--------|------------------|--------|------------------|--------|------------------|
| Kernel DM       | Kernel density | 0.519  | <b>&lt;0.001</b> | 0.421  | <b>&lt;0.001</b> | 0.059  | 0.569            |
| Kernel hardness | Kernel density | 0.565  | <b>&lt;0.001</b> | 0.524  | <b>&lt;0.001</b> | 0.189  | 0.066            |
| NDF             | Kernel stage   | -0.051 | 0.623            | -0.365 | <b>&lt;0.001</b> | 0.041  | 0.693            |
| DMD             | Kernel stage   | 0.198  | 0.054            | 0.012  | 0.908            | -0.416 | <b>&lt;0.001</b> |
| NDFD            | Kernel stage   | 0.027  | 0.798            | 0.484  | <b>&lt;0.001</b> | -0.247 | <b>0.016</b>     |
| CP              | Kernel stage   | 0.004  | 0.971            | -0.103 | 0.324            | -0.098 | 0.343            |
| ADF             | Kernel stage   | -0.472 | <b>&lt;0.001</b> | -0.375 | <b>&lt;0.001</b> | 0.231  | <b>0.024</b>     |
| ADL             | Kernel stage   | -0.349 | <b>&lt;0.001</b> | -0.243 | <b>0.019</b>     | 0.290  | <b>0.004</b>     |
| Starch          | Kernel stage   | 0.625  | <b>&lt;0.001</b> | -0.057 | 0.585            | -0.291 | <b>0.004</b>     |
| Kernel DM       | Kernel stage   | 0.880  | <b>&lt;0.001</b> | -0.239 | <b>0.021</b>     | 0.100  | 0.334            |
| Kernel hardness | Kernel stage   | 0.664  | <b>&lt;0.001</b> | -0.056 | 0.592            | 0.320  | <b>0.002</b>     |
| Kernel density  | Kernel stage   | 0.254  | <b>0.013</b>     | -0.105 | 0.317            | 0.099  | 0.341            |
| NDF             | Whole plant DM | 0.237  | <b>0.021</b>     | 0.491  | <b>&lt;0.001</b> | -0.014 | 0.892            |
| DMD             | Whole plant DM | 0.243  | <b>0.018</b>     | -0.005 | 0.966            | 0.371  | <b>&lt;0.001</b> |
| NDFD            | Whole plant DM | -0.081 | 0.435            | -0.183 | 0.079            | 0.165  | 0.111            |
| CP              | Whole plant DM | -0.420 | <b>&lt;0.001</b> | -0.370 | <b>&lt;0.001</b> | -0.617 | <b>&lt;0.001</b> |
| ADF             | Whole plant DM | -0.072 | 0.490            | 0.260  | <b>0.012</b>     | -0.047 | 0.650            |
| ADL             | Whole plant DM | -0.035 | 0.737            | 0.412  | <b>&lt;0.001</b> | -0.054 | 0.603            |
| Starch          | Whole plant DM | 0.237  | <b>0.021</b>     | 0.039  | 0.710            | 0.441  | <b>&lt;0.001</b> |
| Kernel DM       | Whole plant DM | 0.584  | <b>&lt;0.001</b> | 0.770  | <b>&lt;0.001</b> | 0.788  | <b>&lt;0.001</b> |
| Kernel hardness | Whole plant DM | 0.286  | <b>0.005</b>     | 0.019  | 0.857            | -0.361 | <b>&lt;0.001</b> |
| Kernel density  | Whole plant DM | -0.207 | <b>0.044</b>     | 0.114  | 0.276            | -0.244 | <b>0.017</b>     |
| Kernel stage    | Whole plant DM | 0.614  | <b>&lt;0.001</b> | -0.267 | <b>0.010</b>     | -0.068 | 0.515            |
| NDF             | Cob DM         | -0.206 | <b>0.046</b>     | -      | -                | -      | -                |
| DMD             | Cob DM         | 0.068  | 0.510            | -      | -                | -      | -                |
| NDFD            | Cob DM         | 0.028  | 0.784            | -      | -                | -      | -                |
| CP              | Cob DM         | 0.087  | 0.403            | -      | -                | -      | -                |
| ADF             | Cob DM         | -0.536 | <b>&lt;0.001</b> | -      | -                | -      | -                |
| ADL             | Cob DM         | -0.224 | <b>0.029</b>     | -      | -                | -      | -                |
| Starch          | Cob DM         | 0.696  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| Kernel DM       | Cob DM         | 0.721  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| Kernel hardness | Cob DM         | 0.609  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| Kernel density  | Cob DM         | 0.416  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| Kernel stage    | Cob DM         | 0.679  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| Whole plant DM  | Cob DM         | 0.482  | <b>&lt;0.001</b> | -      | -                | -      | -                |
| NDF             | Yield          | 0.516  | <b>&lt;0.001</b> | -0.583 | <b>&lt;0.001</b> | 0.098  | 0.345            |
| DMD             | Yield          | 0.315  | <b>0.002</b>     | 0.206  | <b>0.048</b>     | -0.259 | <b>0.011</b>     |
| NDFD            | Yield          | -0.205 | <b>0.046</b>     | 0.083  | 0.428            | -0.349 | <b>&lt;0.001</b> |
| CP              | Yield          | -0.362 | <b>&lt;0.001</b> | 0.050  | 0.634            | -0.132 | 0.203            |
| ADF             | Yield          | 0.341  | <b>&lt;0.001</b> | -0.406 | <b>&lt;0.001</b> | 0.133  | 0.199            |
| ADL             | Yield          | 0.022  | 0.830            | -0.189 | 0.069            | 0.273  | <b>0.007</b>     |
| Starch          | Yield          | -0.311 | <b>0.002</b>     | 0.158  | 0.130            | -0.058 | 0.578            |
| Kernel DM       | Yield          | 0.027  | 0.794            | -0.732 | <b>&lt;0.001</b> | -0.202 | 0.050            |
| Kernel hardness | Yield          | -0.139 | 0.179            | -0.321 | <b>0.002</b>     | -0.042 | 0.686            |
| Kernel density  | Yield          | -0.748 | <b>&lt;0.001</b> | -0.349 | <b>&lt;0.001</b> | 0.153  | 0.140            |

|                |       |        |                  |        |                  |        |              |
|----------------|-------|--------|------------------|--------|------------------|--------|--------------|
| Kernel stage   | Yield | 0.227  | <b>0.027</b>     | 0.311  | <b>0.002</b>     | 0.222  | <b>0.031</b> |
| Whole plant DM | Yield | 0.565  | <b>&lt;0.001</b> | -0.645 | <b>&lt;0.001</b> | -0.108 | 0.300        |
| Cob DM         | Yield | -0.029 | 0.780            |        | <0.001           |        |              |

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