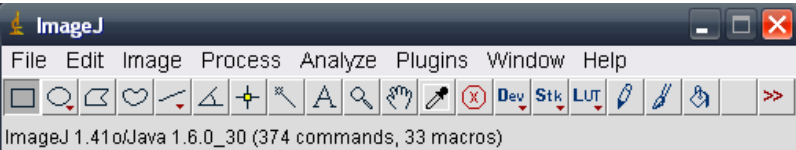

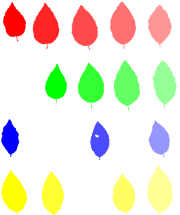



| Lancer le logiciel et le plugin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|--|---|--|-----------|------------|---|---|---|---|---|---|---|-------|-------------|------|----------|----------|-------|---|------|-------|-------------|-----------|-----------|------------|---|------|-------|-------------|----------|-----------|------------|---|------|-------|-------------|----------|-----------|-----------|---|------|-------|------------|-----------|-----------|------------|---|------|-------|-------------|-----------|-----------|-----------|---|------|-------|-------------|----------|-----------|---------|---|------|-------|-------------|-----------|---------|------------|---|------|-------|-------------|-----------|-----------|------------|----|------|-------|-------------|-----------|-----------|-----------|----|------|-------|-------------|-----------|-----------|------------|----|------|-------|-------------|-----------|----------|----------|----|------|-------|-------------|-----------|-----------|-----------|----|------|-------|-------------|-----------|-----------|-----------|----|------|-------|-------------|-----------|----------|-----------|----|------|-------|-------------|-----------|-----------|-----------|----|------|-------|------------|-----------|-----------|------------|----|------|-------|-------------|----------|-----------|------------|----|------|-------|-------------|----------|-----------|-----------|----|------|-------|-------------|-----------|-----------|------------|----|------|-------|-------------|----------|----------|-----------|----|------|-------|-------------|-----------|-----------|-----------|
| ImageJ | | | Trees or planT Organs And STructures analysER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>Cliquer sur <i>Plugins / Toaster / EducationLauncher</i></p> | | | <p>Cliquer sur <i>Preferences / modify</i> et paramétrer les éléments :</p> <ul style="list-style-type: none"> les dossiers de travail : où trouver les données d'entrée, où déposer les résultats, sous quels formats,... les formats d'export. <p>Ouvrir l'image souhaitée (<i>Files / open Image</i>). Puis lancer le module <i>Leaver</i> en cliquant sur la feuille.</p>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Utilisation du Module Leaver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1- Paramétrer l'interface | | 1a- Ouvrir une image TIFF | | 1b- Ouvrir une image BMP, JPG, PNG... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>L'interface permet de paramétrer le traitement pour l'adapter à l'image.</p> <ul style="list-style-type: none"> l'aspect <i>métrique</i> concerne essentiellement les tailles significatives dans la série étudiée, l'aspect <i>gestion</i> donne accès aux chemins et formats d'export. | | <p>Deux paramètres sont modifiables :</p> <p>Leaf - Minimal size (mm²) : surface à partir de laquelle les structures identifiées seront considérées comme des feuilles.</p> <p>Hole - Minimal size (mm²) : ce seuil fixe la plus grande surface des trous qui seront automatiquement comptabilisés dans la surface de la feuille. Au-delà de cette valeur, les trous sont conservés.</p> | | <p>Trois paramètres sont modifiables :</p> <p>Input - Pixel size (= facteur d'échelle) : c'est la taille en millimètre de la hauteur (ou de la largeur) du pixel, supposé carré. Cette valeur sera obtenue en divisant 25,4 (<i>valeur millimétrique du pouce</i>) par la résolution optique de l'image exprimée en dpi (<i>Dot Per Inch</i>) ou ppp (<i>Point Par Pouce</i>), notée lors de la phase de numérisation ou lue à partir d'un éditeur d'images.</p> <p>Leaf - Minimal size (mm²) : surface à partir de laquelle les structures identifiées seront considérées comme des feuilles.</p> <p>Hole - Minimal size (mm²) : ce seuil fixe la plus grande surface des trous qui seront automatiquement comptabilisés dans la surface de la feuille. Au-delà de cette valeur, les trous sont conservés.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2- Contrôle de cohérence | | | 3- Contrôle d'exactitude | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>La cohérence de la coloration permet de rendre compte de la cohérence du traitement : une couleur pour chaque ligne de feuilles, un dégradé de teintes pour chaque feuille dans la ligne.</p> | | |  <p>Le contrôle d'exactitude permet de s'assurer de la bonne segmentation des images, c'est-à-dire de la précision réelle de l'identification des feuilles. Il s'agit d'images de contrôle produites par la superposition sur l'image initiale des zones retenues. La structure anatomique de chaque feuille est vue par transparence, ce qui permet d'évaluer la qualité de la segmentation.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4- Résultats numériques | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Image</td> <td>Identifiant</td> <td>Area</td> <td>adjMajor</td> <td>adjMinor</td> <td>circ.</td> </tr> <tr> <td>2</td> <td>im01</td> <td>01_01</td> <td>655.9054982</td> <td>44.560833</td> <td>24.851326</td> <td>0.56561863</td> </tr> <tr> <td>3</td> <td>im01</td> <td>01_02</td> <td>929.8547711</td> <td>51.72825</td> <td>29.467371</td> <td>0.59902257</td> </tr> <tr> <td>4</td> <td>im01</td> <td>01_03</td> <td>929.0088946</td> <td>51.40731</td> <td>29.663826</td> <td>0.6211946</td> </tr> <tr> <td>5</td> <td>im01</td> <td>01_04</td> <td>954.965832</td> <td>53.280506</td> <td>28.851784</td> <td>0.62881607</td> </tr> <tr> <td>6</td> <td>im01</td> <td>01_05</td> <td>764.1705146</td> <td>47.916622</td> <td>26.236246</td> <td>0.6356188</td> </tr> <tr> <td>7</td> <td>im01</td> <td>02_01</td> <td>319.4115475</td> <td>32.10198</td> <td>16.664772</td> <td>0.60587</td> </tr> <tr> <td>8</td> <td>im01</td> <td>02_02</td> <td>288.7807844</td> <td>29.460972</td> <td>16.8848</td> <td>0.56780344</td> </tr> <tr> <td>9</td> <td>im01</td> <td>02_03</td> <td>627.6188164</td> <td>44.371452</td> <td>23.767012</td> <td>0.58225685</td> </tr> <tr> <td>10</td> <td>im01</td> <td>02_04</td> <td>909.0591137</td> <td>51.572212</td> <td>29.208315</td> <td>0.5969762</td> </tr> <tr> <td>11</td> <td>im01</td> <td>02_05</td> <td>1012.170018</td> <td>57.096497</td> <td>28.637869</td> <td>0.60268813</td> </tr> <tr> <td>12</td> <td>im01</td> <td>02_06</td> <td>873.4391133</td> <td>53.791866</td> <td>25.43952</td> <td>0.600011</td> </tr> <tr> <td>13</td> <td>im01</td> <td>03_01</td> <td>513.2821275</td> <td>42.303856</td> <td>20.227884</td> <td>0.5813066</td> </tr> <tr> <td>14</td> <td>im01</td> <td>03_02</td> <td>160.3581022</td> <td>21.741728</td> <td>11.660619</td> <td>0.6432554</td> </tr> <tr> <td>15</td> <td>im01</td> <td>03_03</td> <td>420.2285502</td> <td>34.264194</td> <td>19.03625</td> <td>0.6478899</td> </tr> <tr> <td>16</td> <td>im01</td> <td>03_04</td> <td>576.7300293</td> <td>43.486485</td> <td>21.407778</td> <td>0.6160087</td> </tr> <tr> <td>17</td> <td>im01</td> <td>03_05</td> <td>205.935072</td> <td>23.605568</td> <td>13.621956</td> <td>0.68553084</td> </tr> <tr> <td>18</td> <td>im01</td> <td>03_06</td> <td>604.7012995</td> <td>42.77645</td> <td>22.971014</td> <td>0.60379565</td> </tr> <tr> <td>19</td> <td>im01</td> <td>04_01</td> <td>877.5394635</td> <td>52.14375</td> <td>27.245235</td> <td>0.6232924</td> </tr> <tr> <td>20</td> <td>im01</td> <td>04_02</td> <td>817.1166453</td> <td>52.076164</td> <td>25.114407</td> <td>0.61350995</td> </tr> <tr> <td>21</td> <td>im01</td> <td>04_03</td> <td>463.6334813</td> <td>36.79185</td> <td>20.23639</td> <td>0.6205293</td> </tr> <tr> <td>22</td> <td>im01</td> <td>04_04</td> <td>758.8085182</td> <td>48.101654</td> <td>25.112564</td> <td>0.6115866</td> </tr> </tbody> </table> | | | | | | | A | B | C | D | E | F | 1 | Image | Identifiant | Area | adjMajor | adjMinor | circ. | 2 | im01 | 01_01 | 655.9054982 | 44.560833 | 24.851326 | 0.56561863 | 3 | im01 | 01_02 | 929.8547711 | 51.72825 | 29.467371 | 0.59902257 | 4 | im01 | 01_03 | 929.0088946 | 51.40731 | 29.663826 | 0.6211946 | 5 | im01 | 01_04 | 954.965832 | 53.280506 | 28.851784 | 0.62881607 | 6 | im01 | 01_05 | 764.1705146 | 47.916622 | 26.236246 | 0.6356188 | 7 | im01 | 02_01 | 319.4115475 | 32.10198 | 16.664772 | 0.60587 | 8 | im01 | 02_02 | 288.7807844 | 29.460972 | 16.8848 | 0.56780344 | 9 | im01 | 02_03 | 627.6188164 | 44.371452 | 23.767012 | 0.58225685 | 10 | im01 | 02_04 | 909.0591137 | 51.572212 | 29.208315 | 0.5969762 | 11 | im01 | 02_05 | 1012.170018 | 57.096497 | 28.637869 | 0.60268813 | 12 | im01 | 02_06 | 873.4391133 | 53.791866 | 25.43952 | 0.600011 | 13 | im01 | 03_01 | 513.2821275 | 42.303856 | 20.227884 | 0.5813066 | 14 | im01 | 03_02 | 160.3581022 | 21.741728 | 11.660619 | 0.6432554 | 15 | im01 | 03_03 | 420.2285502 | 34.264194 | 19.03625 | 0.6478899 | 16 | im01 | 03_04 | 576.7300293 | 43.486485 | 21.407778 | 0.6160087 | 17 | im01 | 03_05 | 205.935072 | 23.605568 | 13.621956 | 0.68553084 | 18 | im01 | 03_06 | 604.7012995 | 42.77645 | 22.971014 | 0.60379565 | 19 | im01 | 04_01 | 877.5394635 | 52.14375 | 27.245235 | 0.6232924 | 20 | im01 | 04_02 | 817.1166453 | 52.076164 | 25.114407 | 0.61350995 | 21 | im01 | 04_03 | 463.6334813 | 36.79185 | 20.23639 | 0.6205293 | 22 | im01 | 04_04 | 758.8085182 | 48.101654 | 25.112564 | 0.6115866 |
| | A | B | C | D | E | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Image | Identifiant | Area | adjMajor | adjMinor | circ. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | im01 | 01_01 | 655.9054982 | 44.560833 | 24.851326 | 0.56561863 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | im01 | 01_02 | 929.8547711 | 51.72825 | 29.467371 | 0.59902257 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | im01 | 01_03 | 929.0088946 | 51.40731 | 29.663826 | 0.6211946 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | im01 | 01_04 | 954.965832 | 53.280506 | 28.851784 | 0.62881607 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | im01 | 01_05 | 764.1705146 | 47.916622 | 26.236246 | 0.6356188 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | im01 | 02_01 | 319.4115475 | 32.10198 | 16.664772 | 0.60587 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | im01 | 02_02 | 288.7807844 | 29.460972 | 16.8848 | 0.56780344 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | im01 | 02_03 | 627.6188164 | 44.371452 | 23.767012 | 0.58225685 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | im01 | 02_04 | 909.0591137 | 51.572212 | 29.208315 | 0.5969762 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | im01 | 02_05 | 1012.170018 | 57.096497 | 28.637869 | 0.60268813 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | im01 | 02_06 | 873.4391133 | 53.791866 | 25.43952 | 0.600011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | im01 | 03_01 | 513.2821275 | 42.303856 | 20.227884 | 0.5813066 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | im01 | 03_02 | 160.3581022 | 21.741728 | 11.660619 | 0.6432554 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | im01 | 03_03 | 420.2285502 | 34.264194 | 19.03625 | 0.6478899 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | im01 | 03_04 | 576.7300293 | 43.486485 | 21.407778 | 0.6160087 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | im01 | 03_05 | 205.935072 | 23.605568 | 13.621956 | 0.68553084 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | im01 | 03_06 | 604.7012995 | 42.77645 | 22.971014 | 0.60379565 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | im01 | 04_01 | 877.5394635 | 52.14375 | 27.245235 | 0.6232924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | im01 | 04_02 | 817.1166453 | 52.076164 | 25.114407 | 0.61350995 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | im01 | 04_03 | 463.6334813 | 36.79185 | 20.23639 | 0.6205293 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | im01 | 04_04 | 758.8085182 | 48.101654 | 25.112564 | 0.6115866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Chaque ligne correspond à une feuille traitée. Les deux premières colonnes permettent d'identifier la feuille dans la série d'images traitées : la première donne le nom de l'image, la seconde le n° de ligne et le rang de la feuille.</p> <p>Les quatre colonnes suivantes sont les paramètres évalués.</p> <p>Area : surface en mm² de la feuille.</p> <p>adjLength : c'est la longueur « ajustée » (en mm) de la feuille.</p> <p>adjWidth : c'est la largeur « ajustée » (en mm) de la feuille.</p> <p>Circularity : c'est le coefficient de circularité : il décrit la compacité de la feuille. Il est défini par $4\pi \text{ (aire/périmètre}^2\text{)}$. Une valeur de 1 indique un cercle parfait. Une valeur tendant vers 0 caractérise une forme allongée. <i>Les valeurs ne sont pas pertinentes pour des petits objets (pour lesquels les pixels du périmètre se confondent avec les pixels de la surface). Dans ce cas, la valeur 1 sera donnée.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |