

Leaves features extraction platform



Umeå University

Select leaf images path



1. Leaves general ☐ ▶

3. Per serration general ☐ ▶

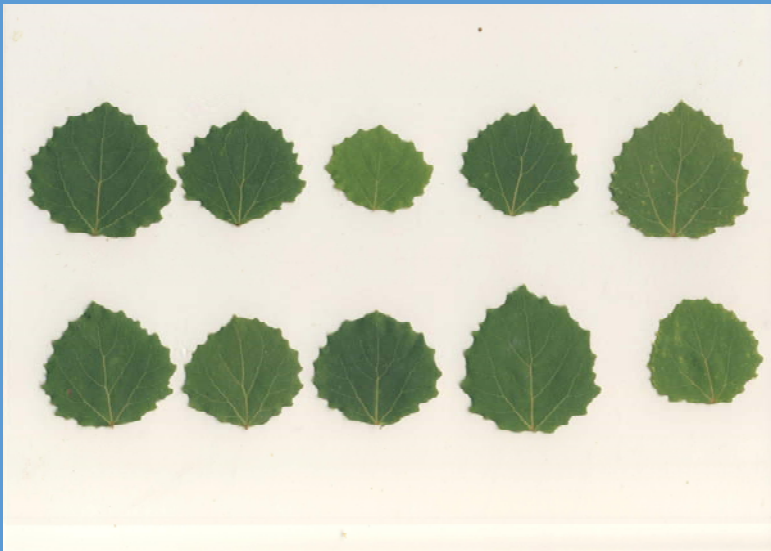
5. Vein general ☐ ▶

2. Boundary evenly
segment coordinate ☐

Number
(100-1000)

4. Boundary curvature ☐ ▶

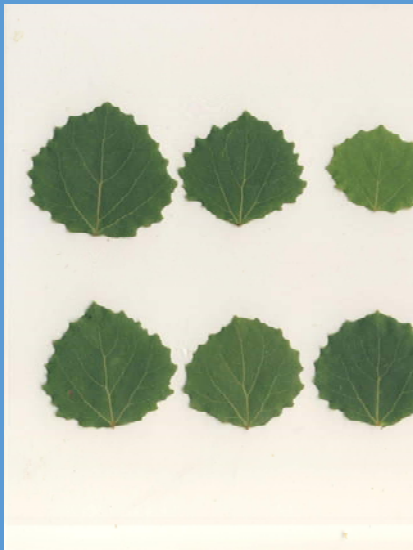
6. Vein curvature ☐ ▶



1. Leaves general



2. Boundary evenly
segment coordinate



round or not

serration_number

serration_depth_mean

serration_depth_median

serration_depth_std

serration_width_mean

serration_width_median

serration_width_std

serration_area_mean

serration_area_median

serration_area_std

boundary_curvature_mean

boundary_curvature_median

boundary_curvature_std

leaf_entire_area

leaf_area_without_holes

leaf_perimeter

length_left

length_middle

length_right

width_top

width_middle

width_bottom

L:W (ratio=length_middle/width_middle)

**Note: parameters above of one scanned file
(many leaves) are saved in one file.**



5. Vein general



6. Vein curvature



1. Leaves general ▶

2. Boundary evenly
segment coordinate ○

Number
(100-1000)

3. Per serration general ▶

4. Boundary curvature ▶

serration_depth(mm)

serration_width(mm)

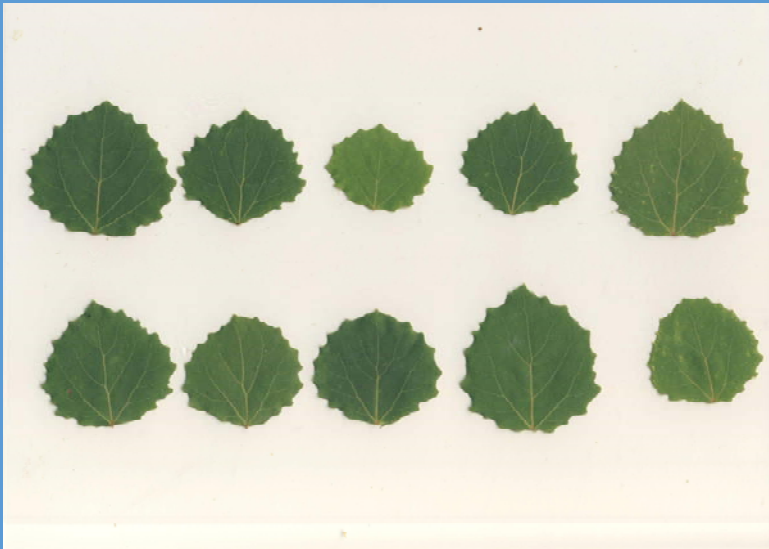
serration_area(mm2)

serration_curvature_mean

serration_curvature_median

serration_curvature_std

Note: parameters above of one
scanned file (many leaves) are
saved in one file.



1. Leaves general ▶

3. Per serration general ▶

5. Vein general ▶

2. Boundary evenly
segment coordinate



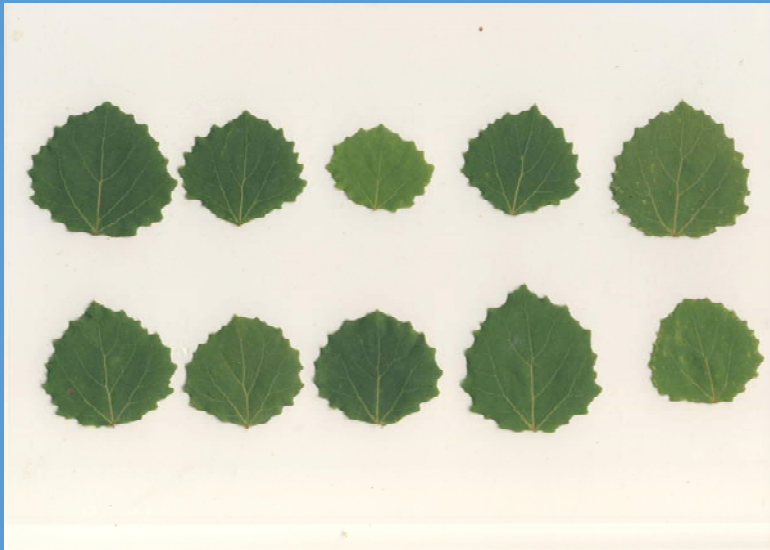
Number
(100-1000)

4. Boundary curvature ▶

serrations_curvature
boundary_curvature



Note: parameters above of
each leaf are saved in one file.



1. Leaves general ▶

2. Boundary evenly
segment coordinate ●

Number
(100-1000)

3. Per serration general ▶

4. Boundary curvature ▶

5. Vein general ▶

6. Vein curvature ▶

vein_angle_mean

vein_angle_median

vein_angle_std

top_left_angle

top_right_angle

bottom_left_angle

bottom_right_angle

main_vein_curvature_mean

main_vein_curvature_median

main_vein_curvature_std

sub_vein_curvature_mean

sub_vein_curvature_median

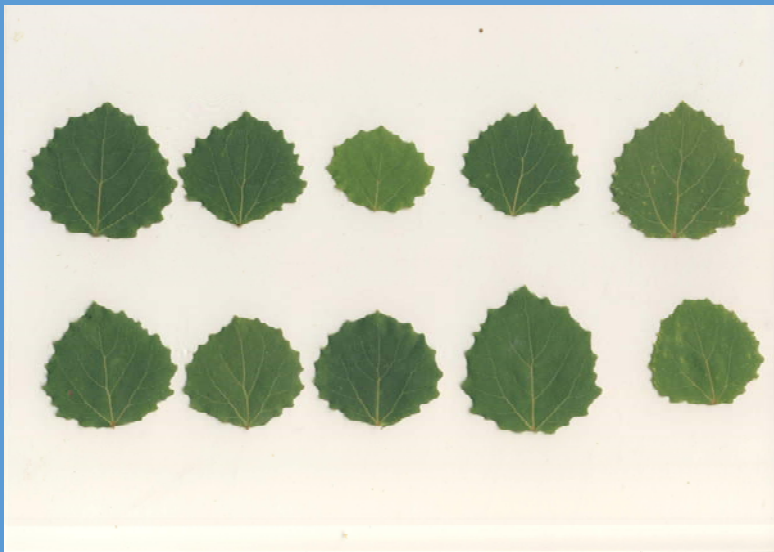
sub_vein_curvature_std

sub_vein_number

vein_cross_angle_number

vein_cross_angle(multi)

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1. Leaves general ▶

2. Boundary evenly
segment coordinate ●

Number
(100-1000)

3. Per serration general ▶

4. Boundary curvature ▶

5. Vein general ▶

6. Vein curvature ▶

main_vein_curvature
sub_vein_curvature

Note: parameters above of
each leaf are saved in one file.

