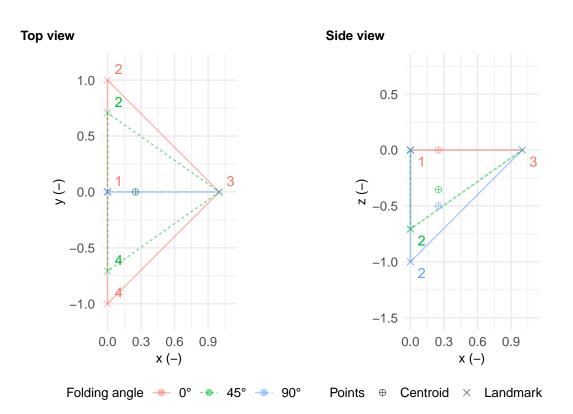
Supplementary Material

to "Towards More Realistic Leaf Shapes in Functional-Structural Plant Models"



Supplementary Figure 1: Different folding angles $(0^{\circ}, 45^{\circ}, 90^{\circ})$ of a simplified leaf (isosceles triangle) with four landmarks and their centroid (arithmetic mean of all landmarks points in the shape).

Supplementary Table 1: Dimensionless landmark distances to the centroid (d_C) for different folding angles $(0^{\circ}, 45^{\circ}, 90^{\circ})$ (see Supplementary Figure 1) of a simplified leaf (isosceles triangle, A = 0.5) for comparing centroid size (CS) scaling with the proposed scaling factor $w = \sqrt{\frac{A}{\sqrt{3}}}$, which is related to the square root of the surface area. Centroid size is defined as the square root of the sum of squared distances of all landmarks to their centroid.

| A(-) | Angle | Landmark | d_C (-) | d_C^2 (-) | $\sum d_C^2$ (-) | CS (-) | w (-) |
|------|--------------|----------|-----------|-------------|------------------|--------|-------|
| 0.5 | 0° | 1 | 0.25 | 0.06 | 2.75 | 1.66 | 0.54 |
| | 0° | 2 | 1.03 | 1.06 | | | |
| | 0° | 3 | 0.75 | 0.56 | | | |
| | 0° | 4 | 1.03 | 1.06 | | | |
| 0.5 | 45° | 1 | 0.43 | 0.19 | 2.25 | 1.50 | 0.54 |
| | 45° | 2 | 0.83 | 0.69 | | | |
| | 45° | 3 | 0.83 | 0.69 | | | |
| | 45° | 4 | 0.83 | 0.69 | | | |
| 0.5 | 90° | 1 | 0.56 | 0.31 | 1.75 | 1.32 | 0.54 |
| | 90° | 2 | 0.56 | 0.31 | | | |
| | 90° | 3 | 0.90 | 0.81 | | | |
| | 90° | 4 | 0.56 | 0.31 | | | |