Tree A

An ancestral Pax-like gene evolved here and is homologous to all animals.

Tree B

Complex eye structure evolved independently in several groups and is only homologous within those groups.

Cortical cells

GLABRA-2 is expressed, and the cell remains hairless.

GLABRA-2 is not expressed, and the cell will develop a root hair.

The root cap cells will be sloughed off before root hairs emerge.
**EXPERIMENT**

- **Chthamalus**
- **Balanus**

High tide

Balanus realized niche

Low tide

**RESULTS**

High tide

Chthamalus fundamental niche

Low tide

**Graphs**

- **G. fuliginosa**
- **G. fortis**

Beak depth

- **Los Hermanos**: G. fuliginosa, allopatric
- **Daphne**: G. fortis, allopatric
- **Santa María, San Cristóbal**: Sympatric populations

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