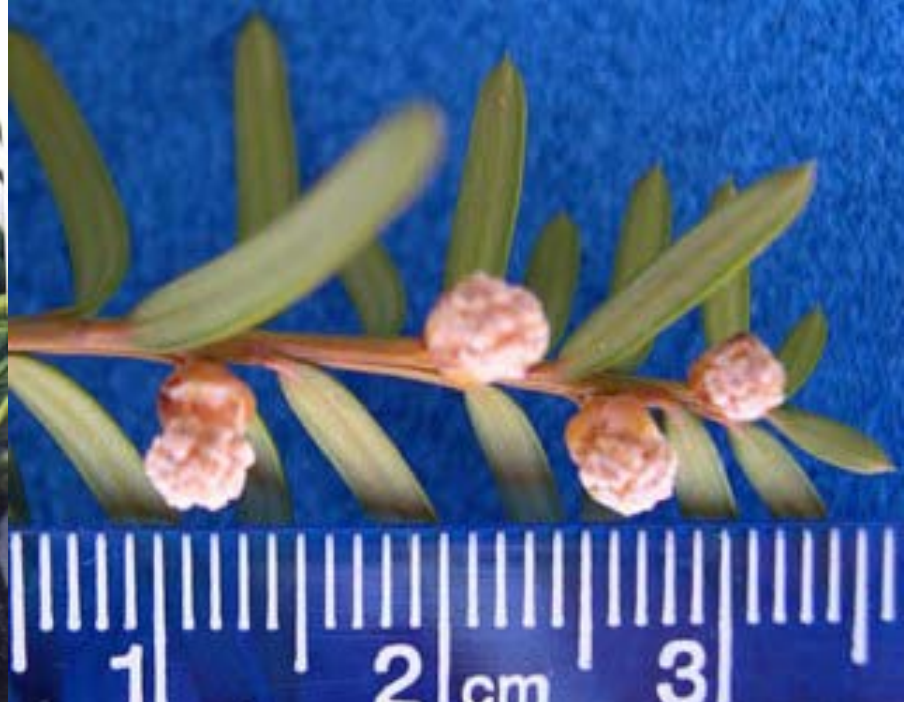


- 1a. Leaves needle-like, borne singly or in small bunches of 2 to 5 or may appear to terminal the ends of short lateral branches; female cones woody, > 2 cm long with > 20 spirally arranged scales Pinaceae**
- 1b. Female cones or needles not as above 2**
- 2a. Leaves narrow, flat, sharp-pointed, and tapered to bases and attached by short petioles, dark green above, glossy, some two-ranked (arise from two sides of twig); female cone with fleshy red coveringTaxaceae**
- 2b. Leaves scale-like and often overlapping, or sometimes short and sharply needle-like; female cones, woody or berry-like when mature with 2 to 12 megasporophylls which may become fleshy with 2 to 5 seeds per cone scale Cupressaceae**



Unknown #1

Gymnosperm Families



1) Cupressaceae

2) Pinaceae

3) Taxaceae

Use www.kwantlen.ca/plantdatabase
(Morphological Search > Plant Family)
to view a list of species in each family

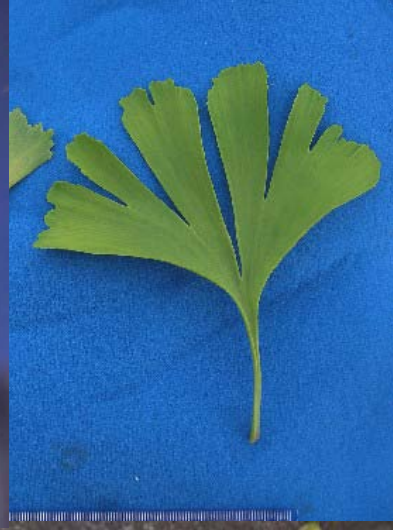
Answer key to three family unknowns



F.Y.I.: Family Araucariaceae e.g. monkey puzzle tree (*Araucaria araucana*)

Gymnosperm Families

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***Ginkgo biloba* (a leafy Gymnosperm but not a conifer): fan shaped leaf blades with dichotomous venation, male cones of *Ginkgo* are similar to pine. The female reproductive structure is more drupe-like and stink when mature. Dioecious. Family = Ginkgoaceae.**