**2-5 Ploidy and Judging**

**RESOURCES:**

* “A brief look at polyploidy”. Gripp. *AOS Bulletin*. 1965. February 135-138.
* “Colchicine-treated orchids”. Doherty. Judges Forum. Awards & Judging tab. aos.org
* “Amateur potourri”. Noble. *Orchids*. 1949 560-561.
* “Crippling”. Midgett. *Orchids*. 2010 314-319.
* aos.org webinar: “Inheritance & Genetics in orchids”. Griesbach. 08-2017. https://www.aos.org/all-about-

orchids/webinars/member-only/inheritance-and-genetics-in-orchids.aspx

* “Hybridizing Orchids: Past, Present, Future”. Tokunaga. *Hybridizers* Supplement to *Orchids*. October 2022 50-61 (particularly 60-61).
* “Chromosomes and plant breeding”. Dorris. *Orchid Review*. Sept. 2009.

**RESEARCH QUESTIONS:**

* Define: aneuploid, diploid, triploid, tetraploid, polyploid, chromosome count, crippling, meristem/mericlone, genome breeding.
* Discuss how ploidy might affect judging flowers: include size, form, color, plant, vigor
* Can you recognize a tetraploid? Just by looking at it? Counting chromosomes? What other characteristics and is that accurate?
* Why can triploids be almost as consistent as a mericlone? Are they fertile? If so, when?