

Disease - Drought – Drainage 2012 Investigations

Larry Stowell, Ph.D.

PACE Turf, LLC

www.paceturf.org



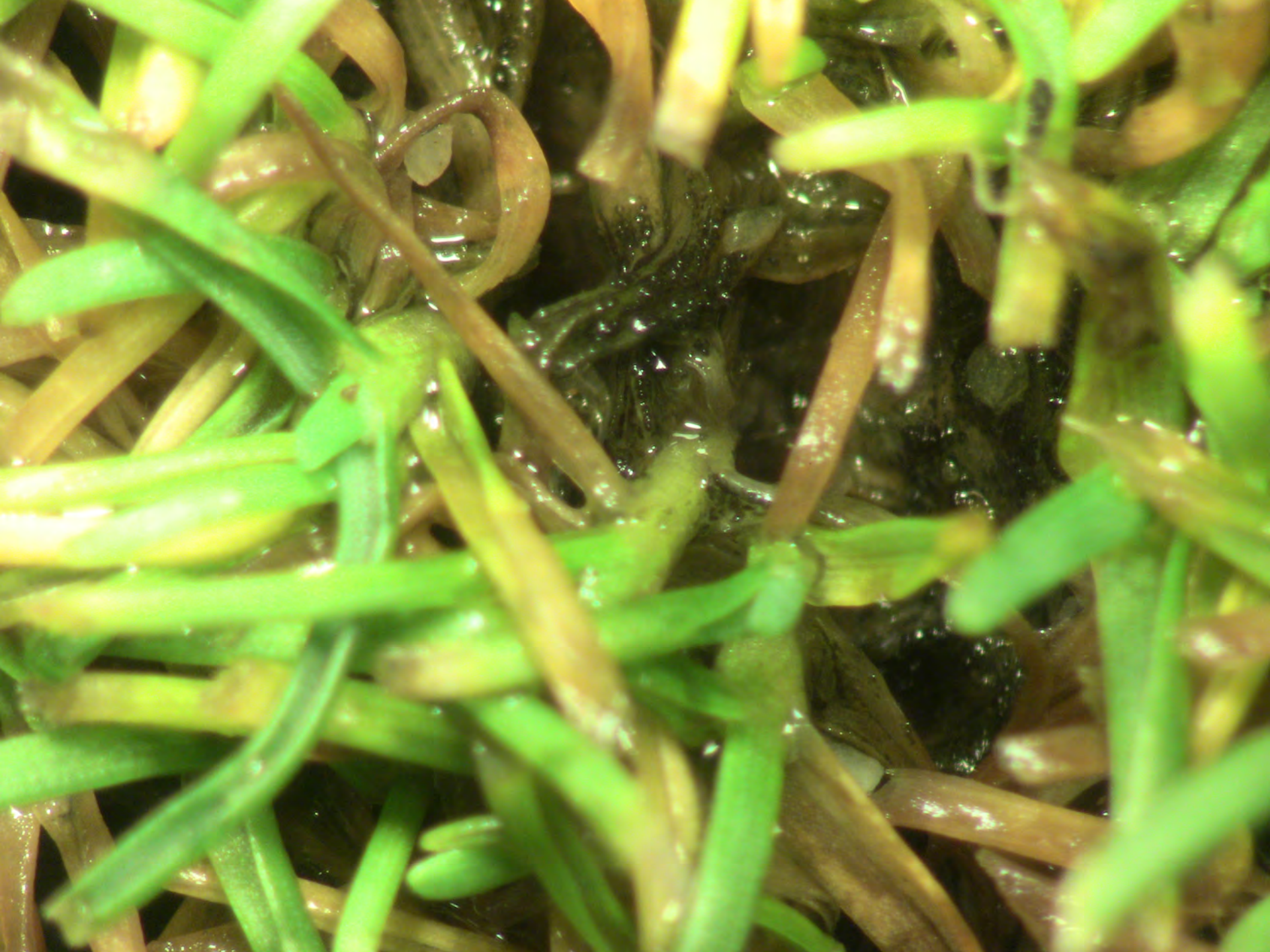
CSI Turf
West Coast Division

Crime Scene

- Poa annua greens
- Late summer
- Irregular chlorotic patches
- Suspects
 - Summer patch
 - Anthracnose
 - Nematodes
 - Algae



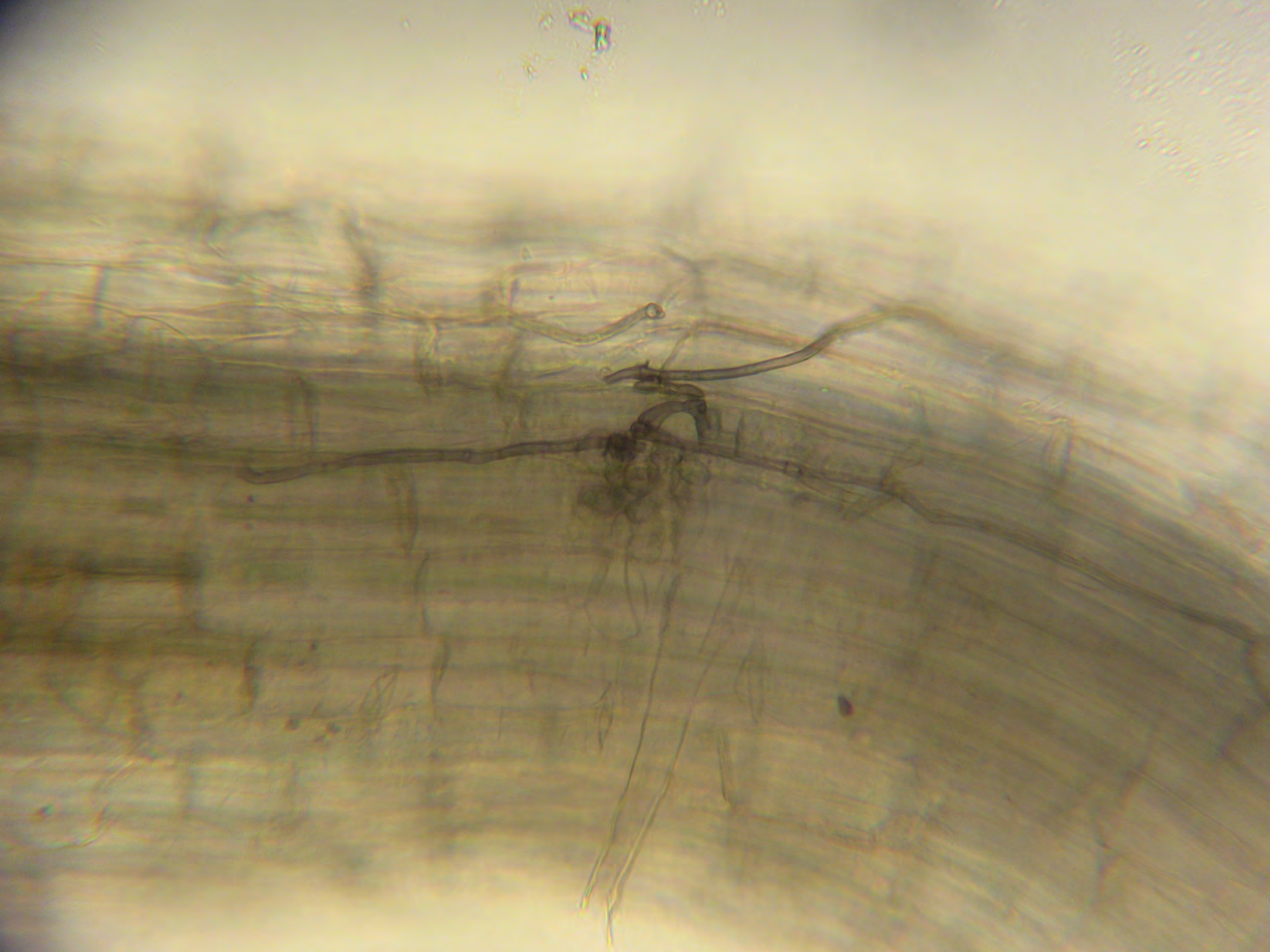












Nostoc and Summer Patch

- Nostoc can be confused for summer patch
- Look beyond the surface of the sample – check the roots
- Chlorothalonil for nostoc
- QoI or DMI fungicide for summer patch

Crime Scene

- Poa annua greens
- Late summer
- Large areas of declining turf
- Suspects
 - Drought
 - Summer patch
 - Anthracnose
 - Rapid blight







Anthracnose

- Summer fungicide program relied heavily on azoxystrobin
- Resistance to Qol fungicides – probably also resistant to thiophanate methyl
- Use chlorothalonil in combination with a DMI fungicide – propiconazole, tebuconazole and triticonazole are good choices

Crime Scene

- Ryegrass overseeded bermuda tee
- Suspects
 - Pythium
 - Rhizoctonia damping out
 - Gray leaf spot

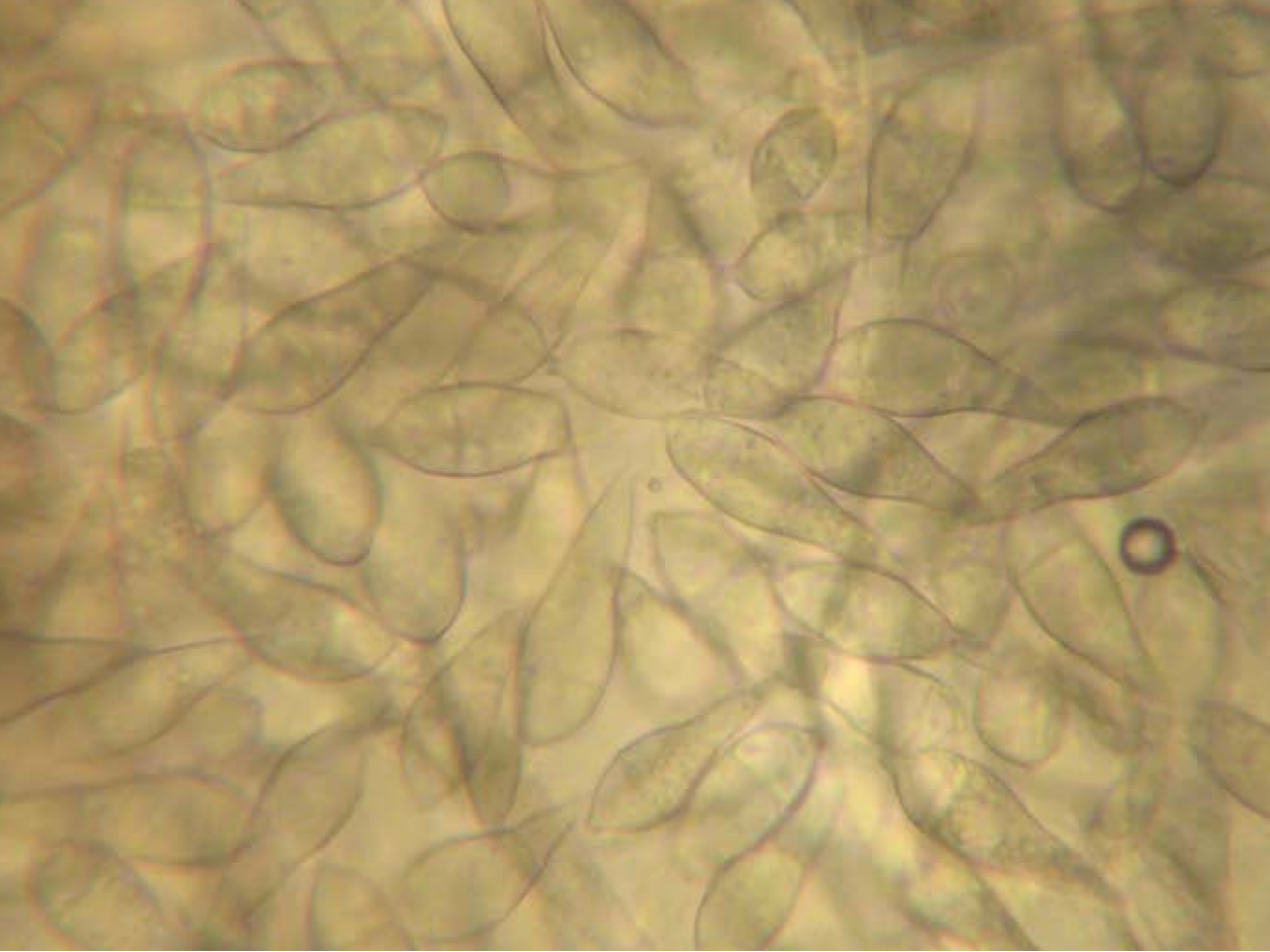














GLS

- Preventive application of Heritage applied prior to seeding
- Repeat application 7 days later
- Resistance to Qol fungicides – use thiophanate methyl or DMI for GLS – if pythium is a concern, use mefenoxam, propamocarb or cyazofamid

Crime Scene

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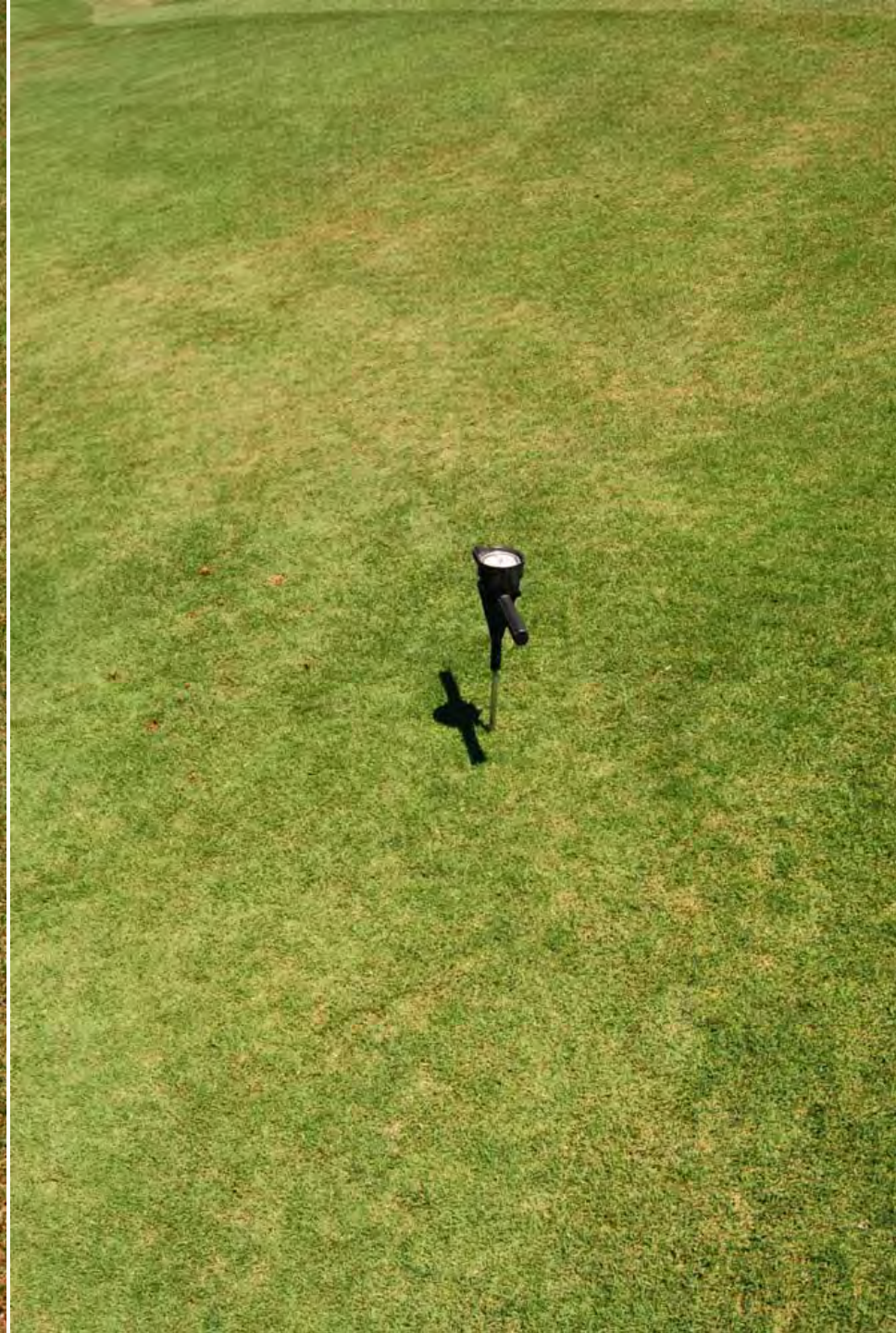


Dreschlera – Melting out

- Summer fungicide program relied heavily on azoxystrobin
- Resistance to Qol fungicides
- Many fungicides are effective, the dicarboximides are a good choice e.g. iprodione or vinclozolin

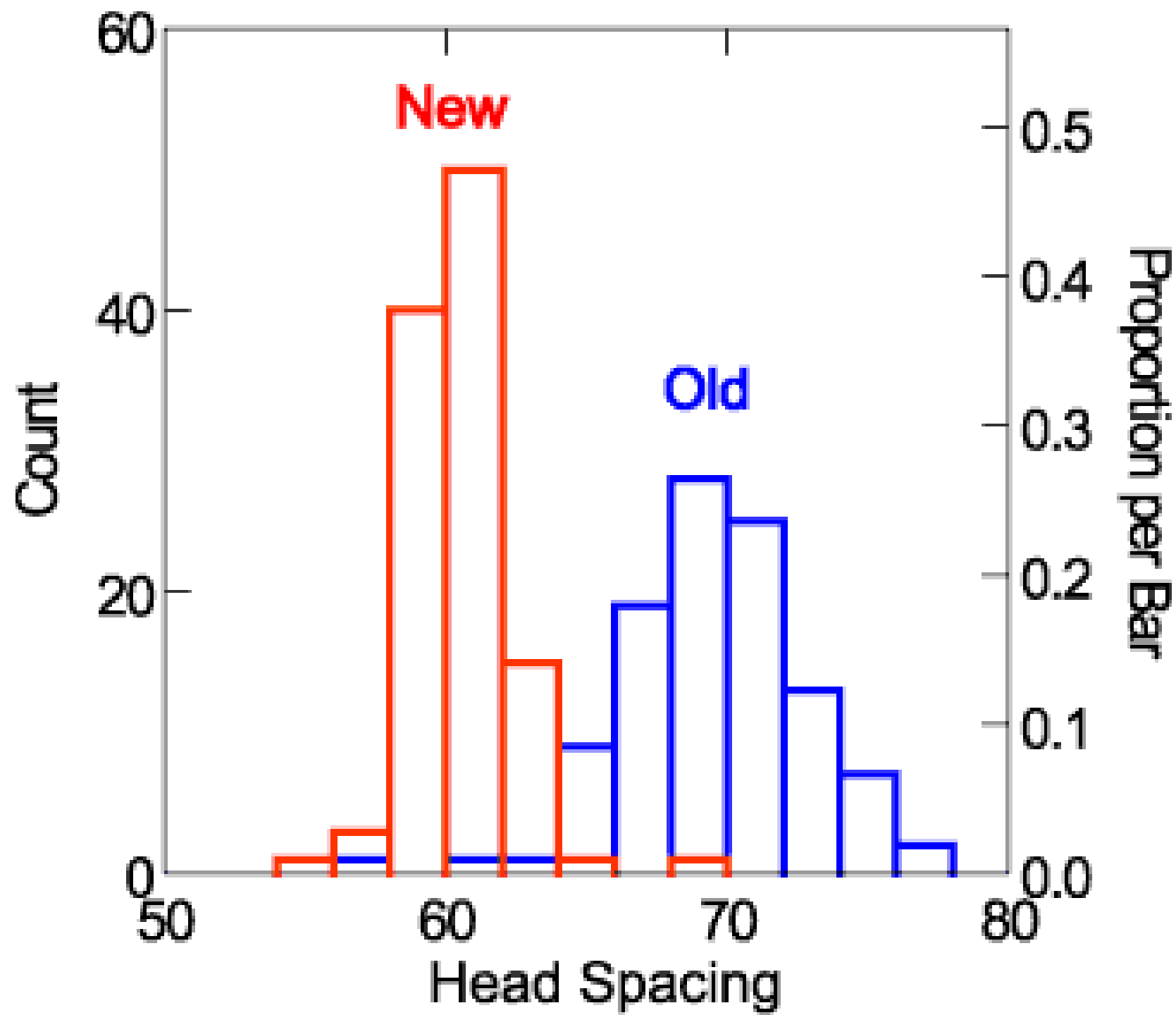
Crime Scene

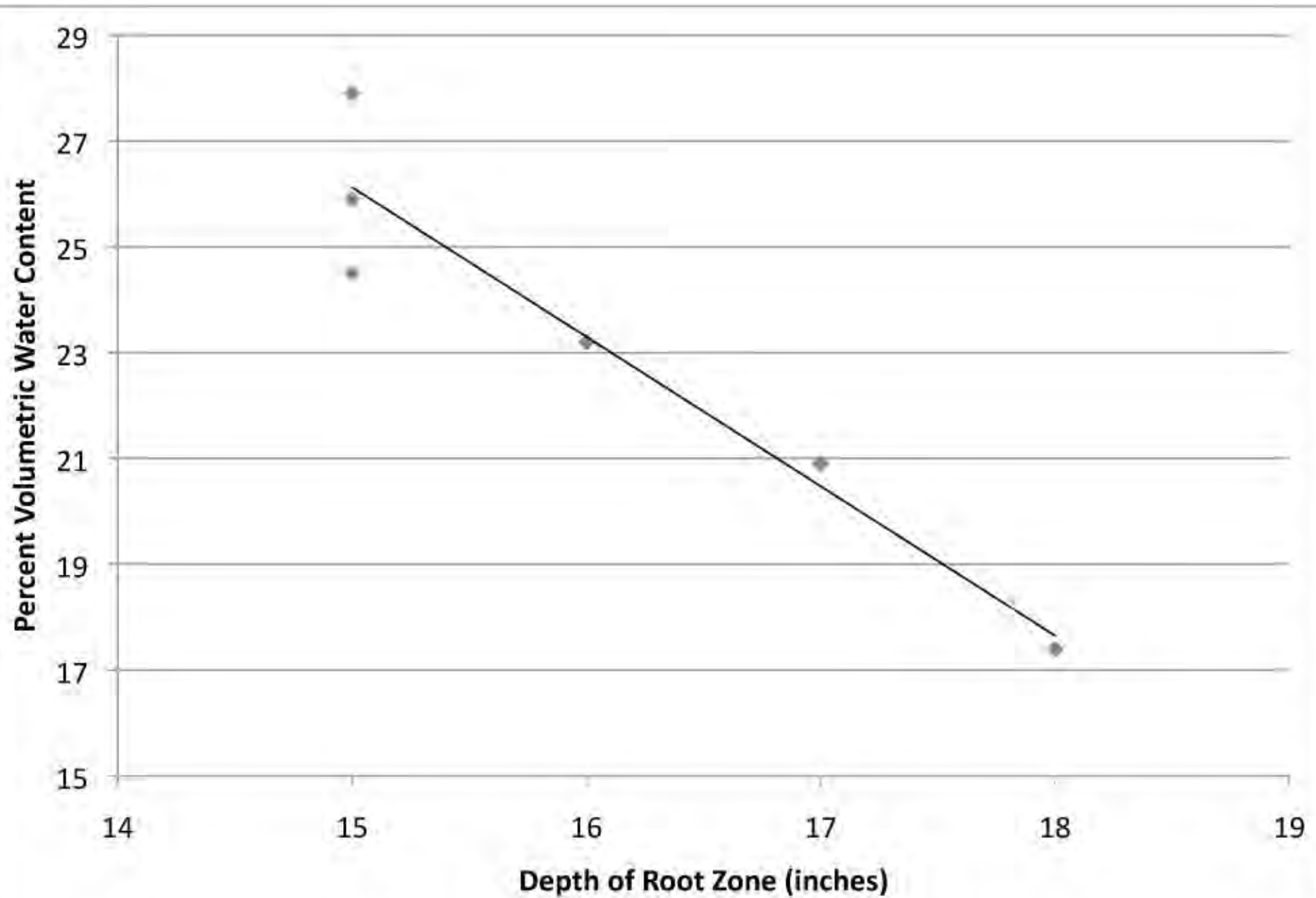
- Various turf types and situations
- Late summer
- Large areas fading out
- Suspects
 - Localized dry spot
 - Fairy ring
 - Irrigation distribution/drought stress











Drought

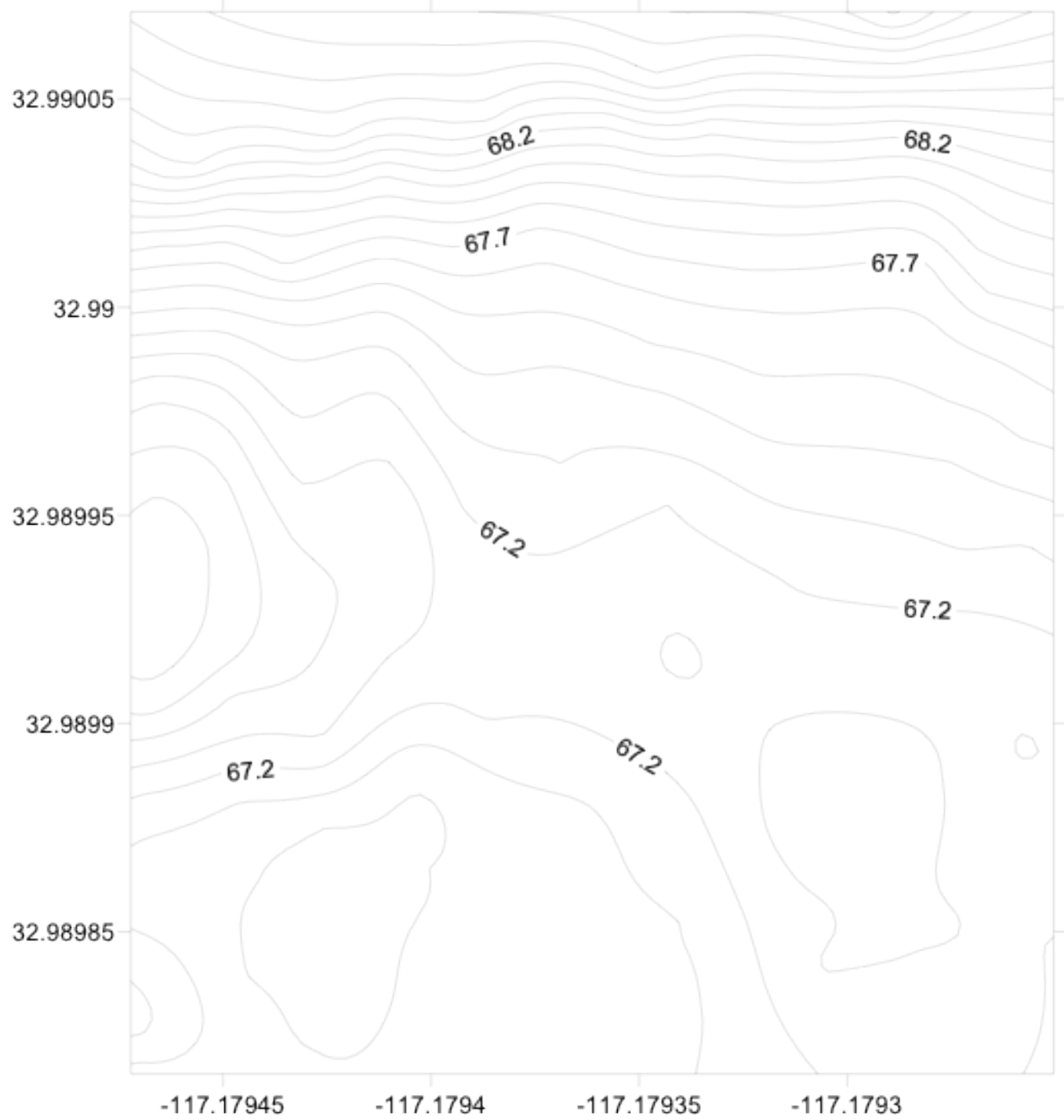
- Root zone depth
- Irrigation distribution problems
- Both solved by hand watering
- Irrigation distribution improvement might help

Crime Scene

- Various turf types and situations
- Normally in warm season
- Large areas fading out
- Suspects
 - Root diseases
 - High salinity
 - Drainage restriction









Drainage

- Surface slope less than 1%
- Heavy clay soil or impervious layer
- Improve contour
- Install drain lines
- Cap with appropriate sand or soil



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