

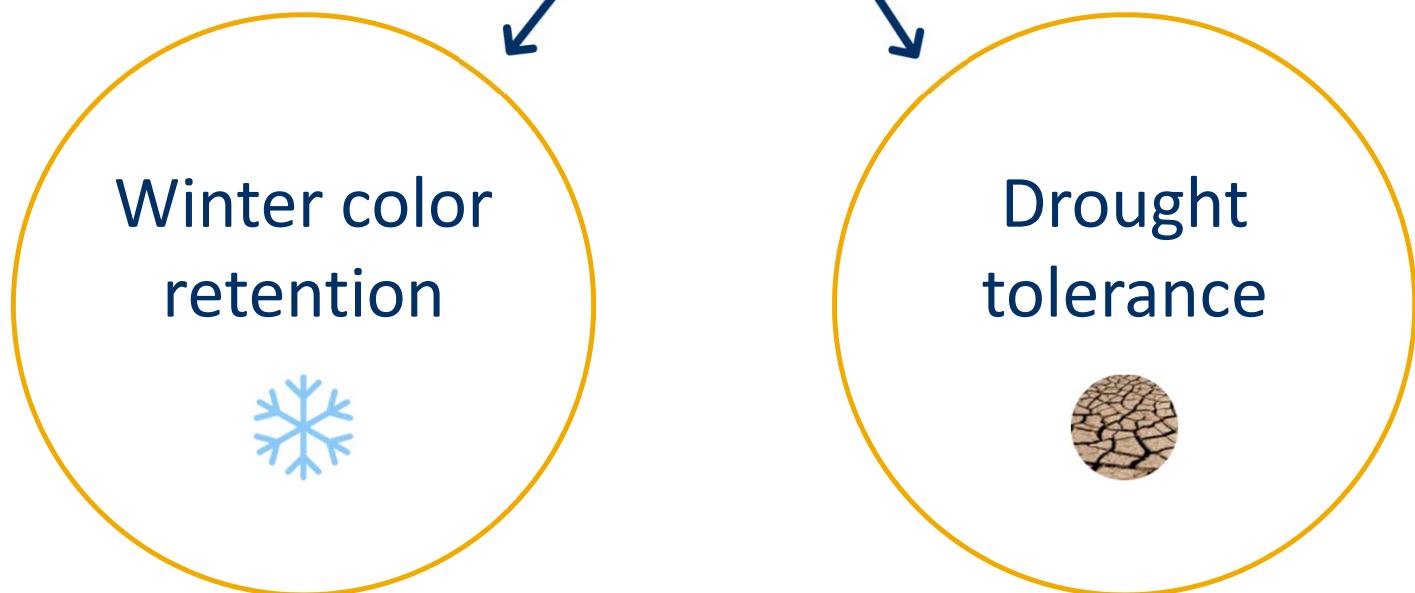


Kikuyugrass research at UC Riverside

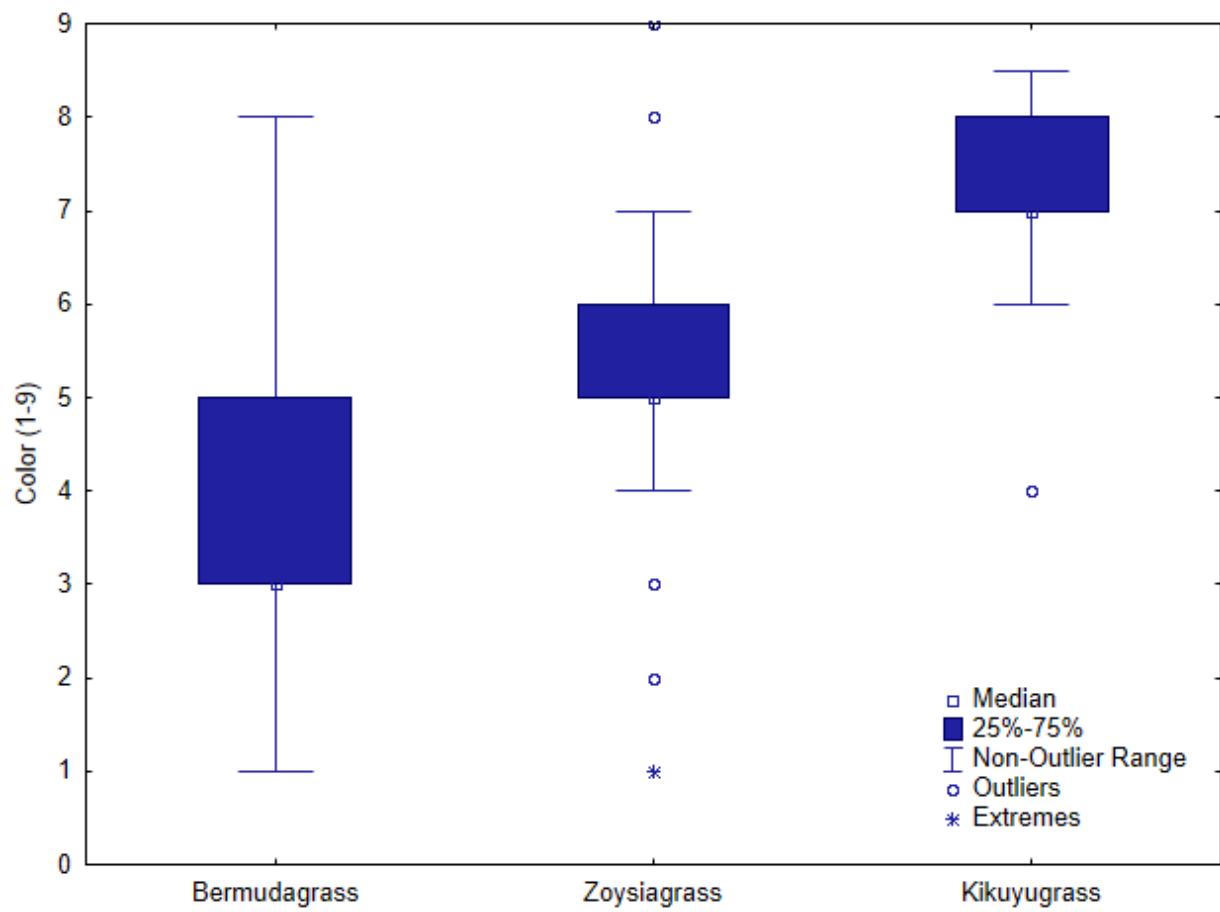
Adam Łukaszewski
Professor of Genetics

Marta Pudzianowska
Postdoctoral scholar

Jim Baird
Turfgrass Specialist



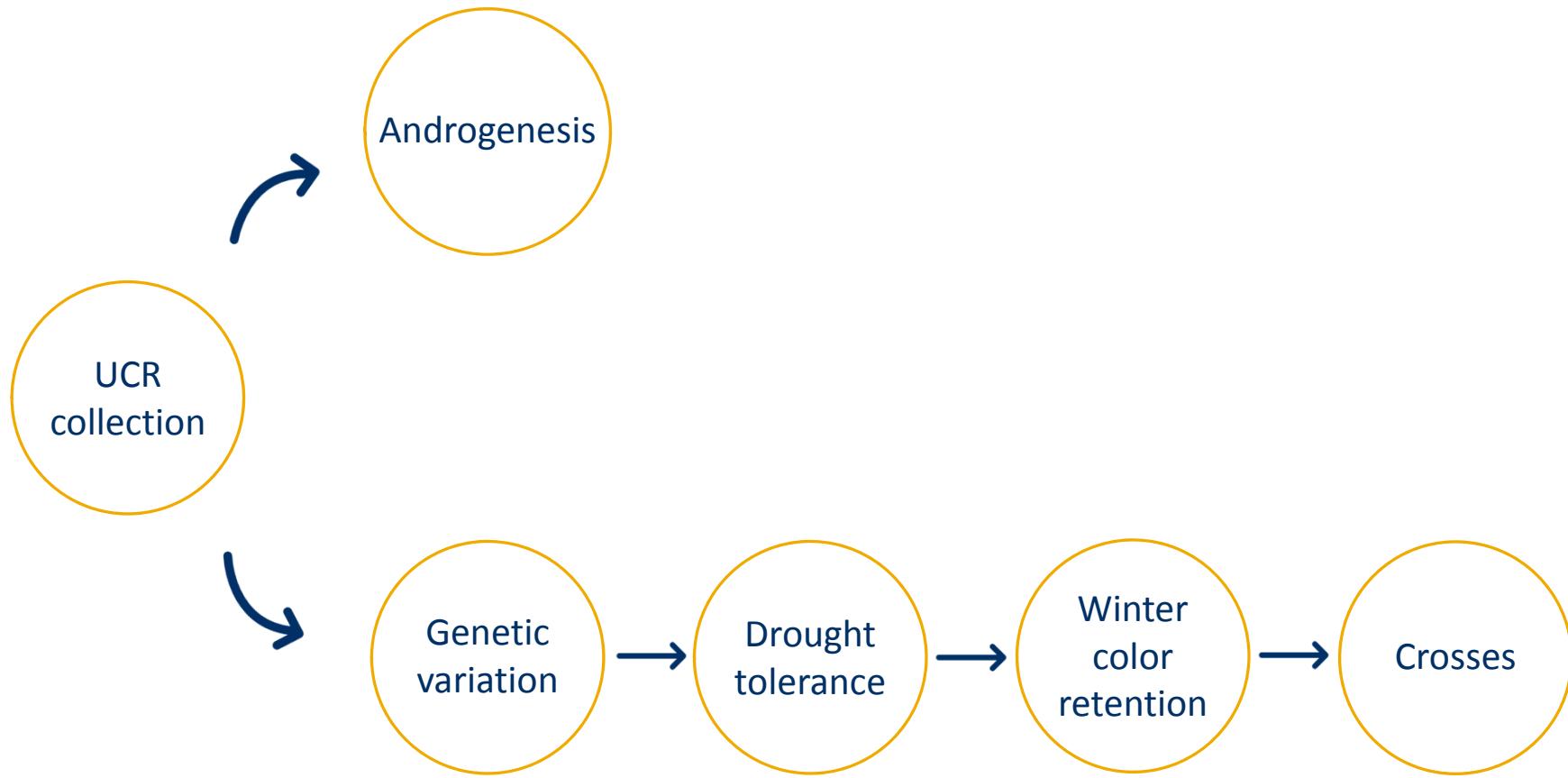
Winter color retention





Drought
tolerance



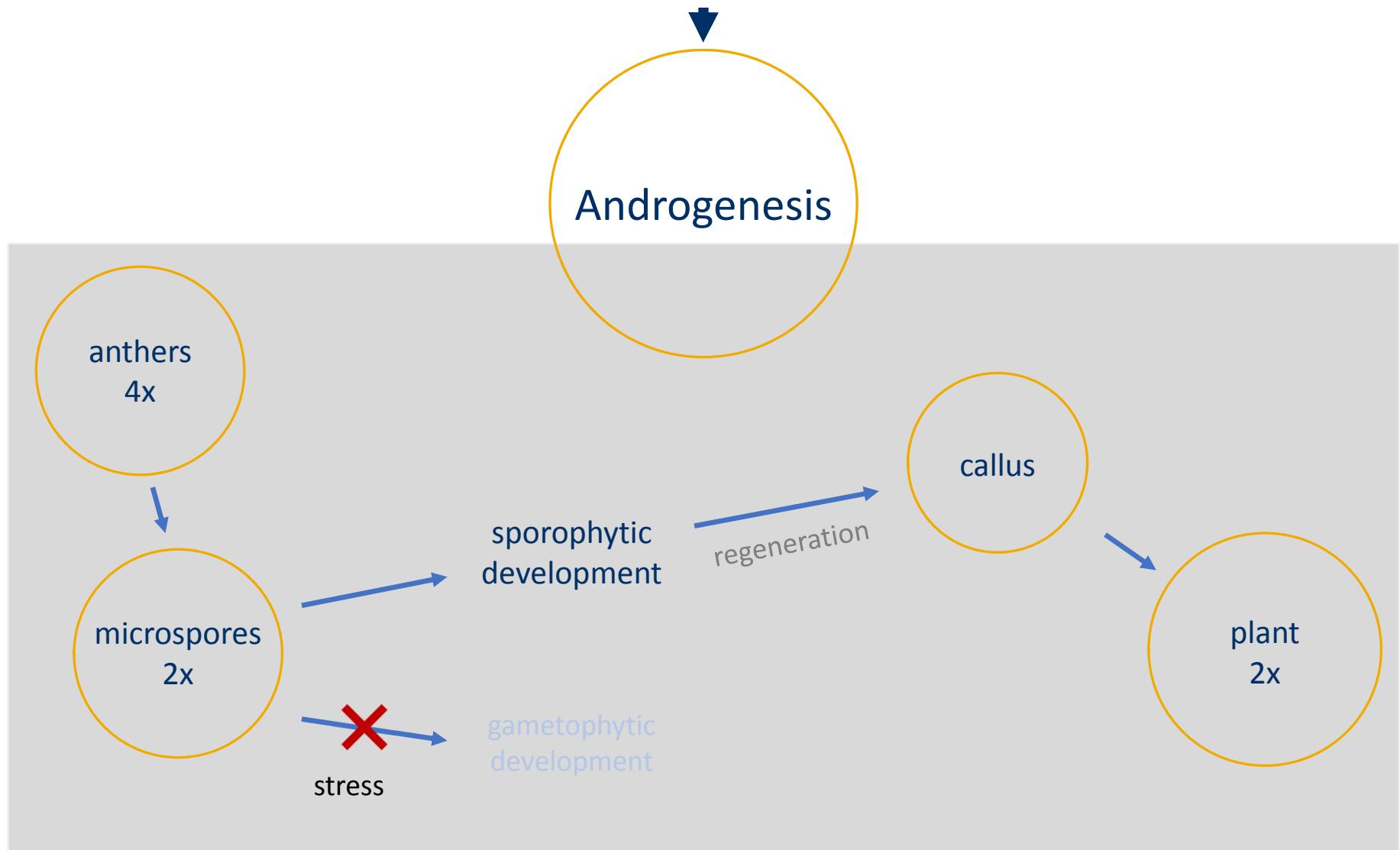


Kikuyugrass breeding

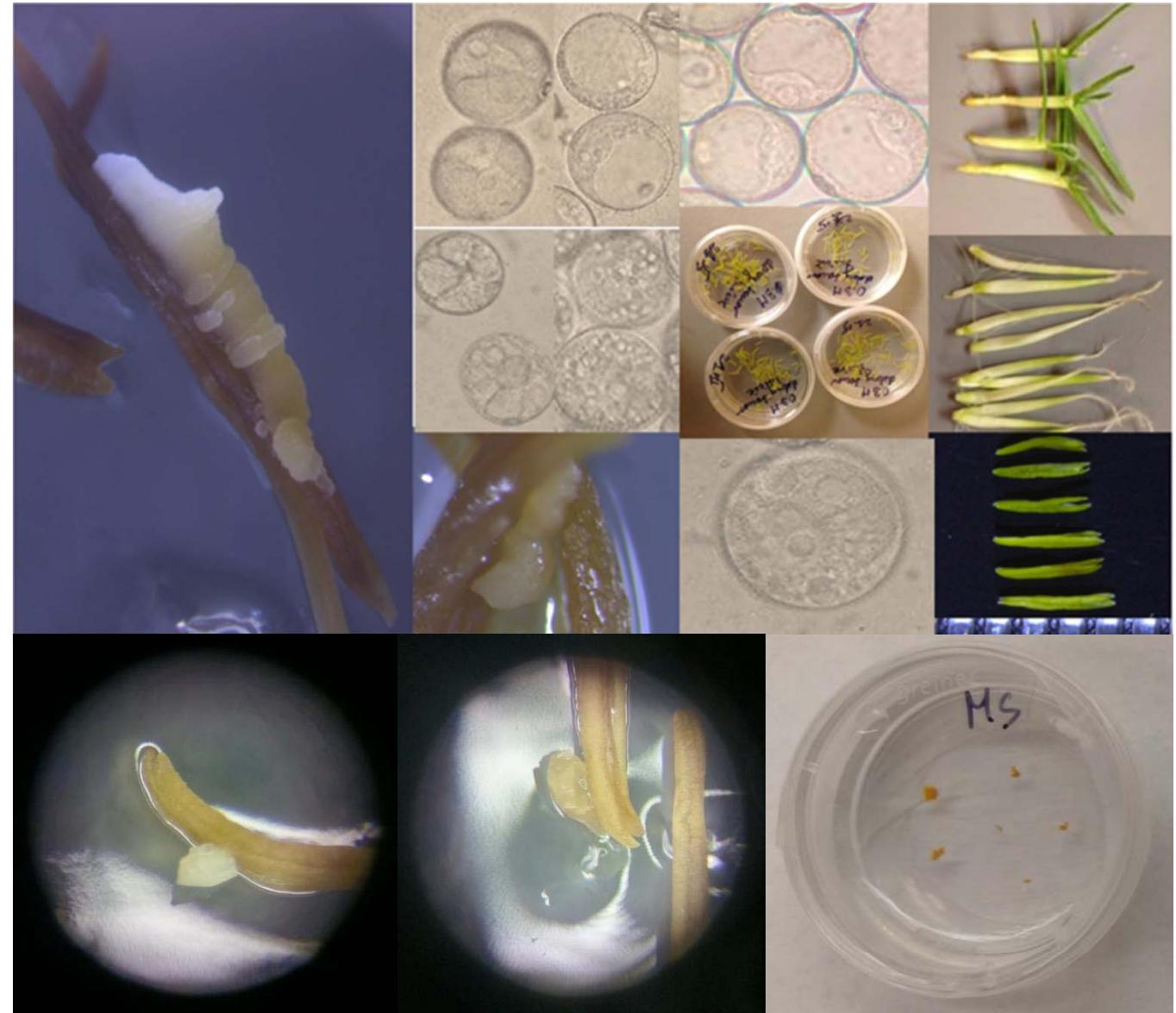
UCR
collection

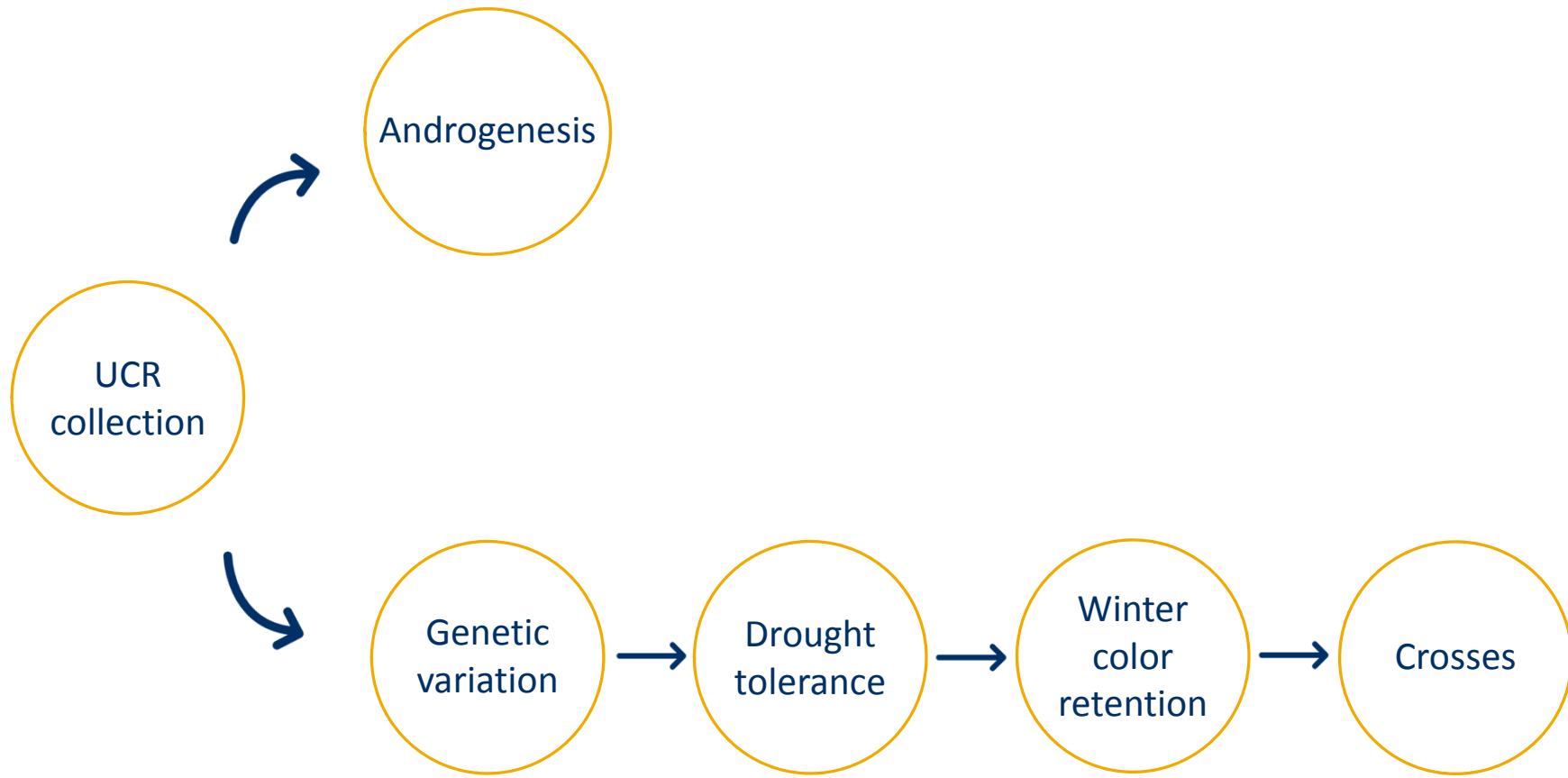


I

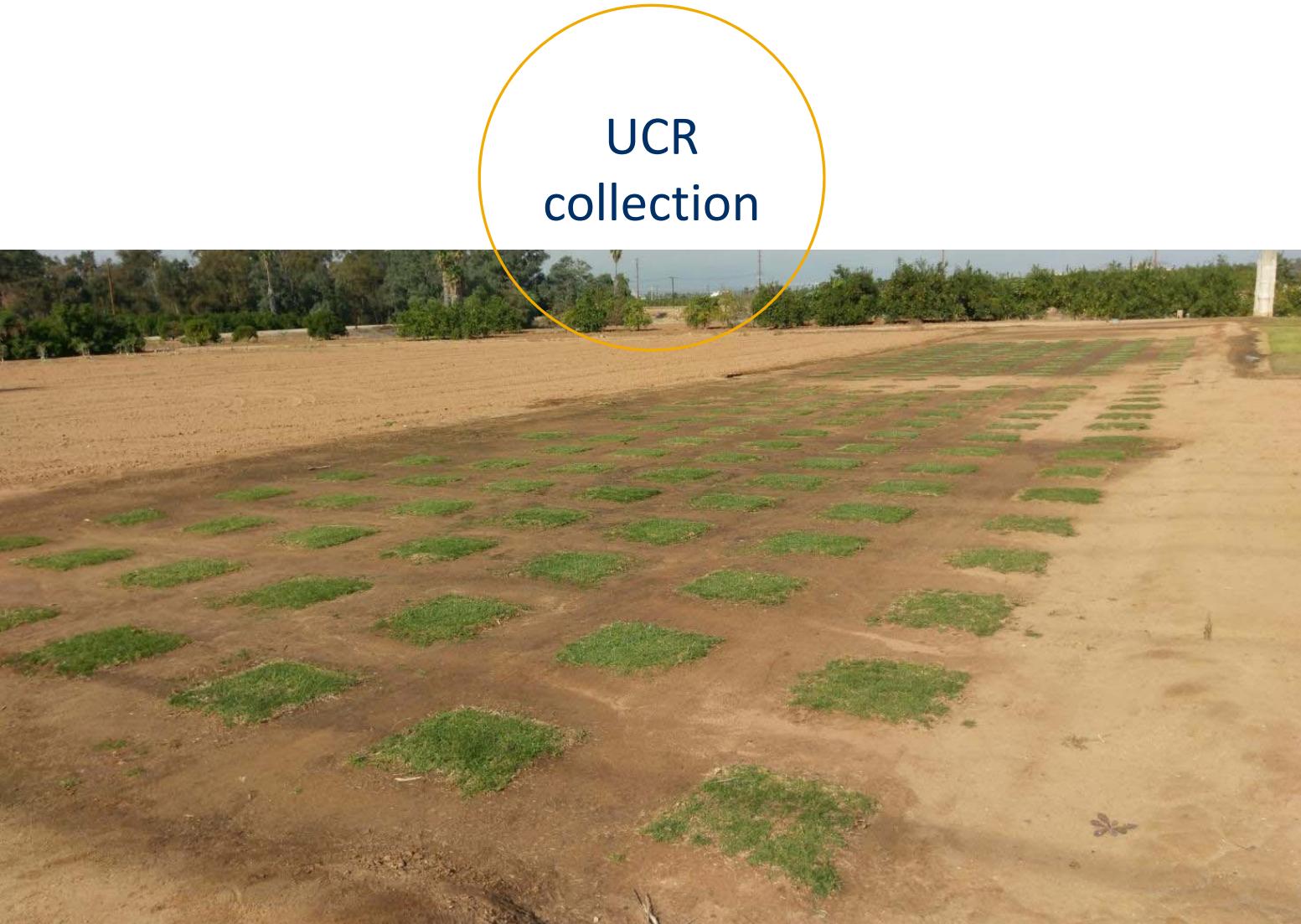


Androgenesis



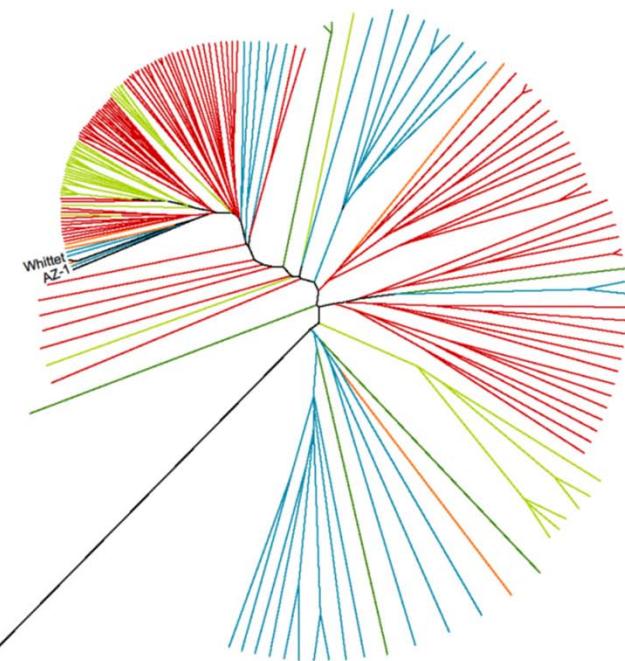
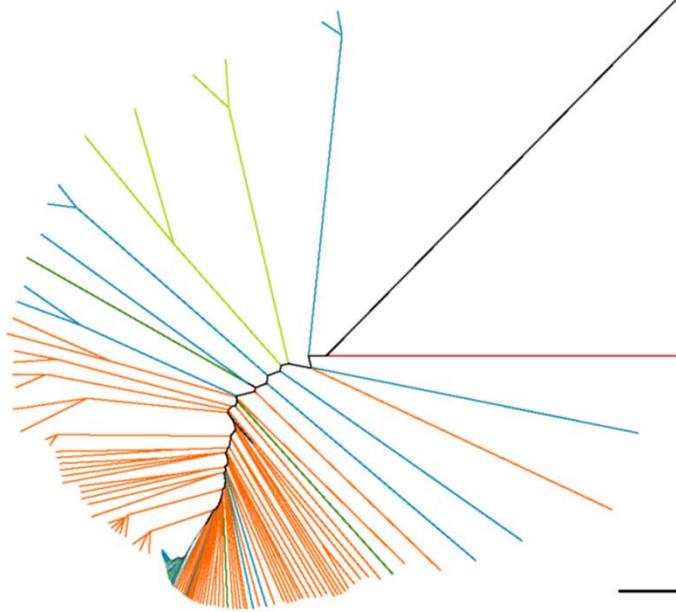
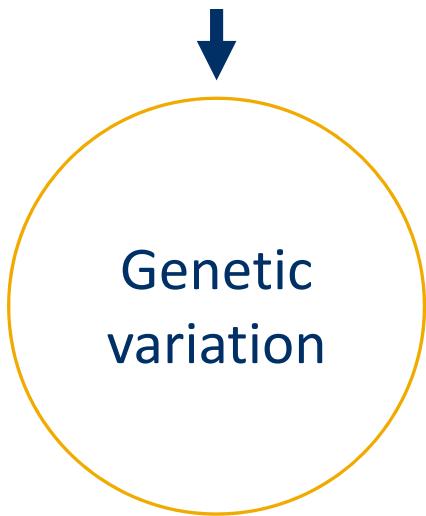


Kikuyugrass breeding



UCR
collection

I



UCR lines
California
Australia
Hawaii Mealani Research Station
Hawaii island

0.1



Drought tolerance

- 103 collection accessions
- last watering 7/8/2017
- visual color evaluation (1-9; 9=best)
- regular watering restoration 10/21/2017

Drought tolerance

Kikuyugrass accessions showing good drought tolerance (color retention 1-9, 9-best)

Days after switching off watering	OPD 58	OPED 03	OPED 05	OPED 06	OPED 07	OPED 08	OPED 10	Whittet 02	Whittet 04	Whittet 05	Whittet 06
9	4	7	4	6.5	6	6.5	4.5	2.5	3.5	3.5	3
14	4.5	6.5	3.5	4	3.5	4	3.5	3.5	4.5	4.5	4
20	4.5	6.5	6	6	5	6	4	3.5	5	5	4
27	5	5	5	6	5	6	5	5	6	6	5
34	5	6	5	5	5	6	6	4	5	5	5
40	5	5	5	5	6	6	6	5	4	5	5
50	5	4	6	6	6	6	6	6	6	6	6
60	6	5	6	6	6	5	6	6	5	6	6
70	5	4	5	5	6	5	6	6	5	5	5
84	6	4	5	4.5	5	5	6	6	6	6	5.5
101	6	5	5	4	6	4	6	6	6	6.5	6
116	6	5	5	4.5	5	4	6.5	6	6	6	5.5
129	7	5	5	5	5	4	6	6	6	7	6
Mean	5.3	5.2	5.0	5.2	5.3	5.2	5.5	5.0	5.2	5.5	5.1

Drought tolerance

Kikuyugrass accessions showing poor drought tolerance (color retention 1-9, 9-best)

Days after switching off watering	AJL 02	C-1(I)	CA35 01	CA39 01	CA51 02	CA87	OPD 02	OPD 09	OPD 12	OPD 13	OPD 32
9	3.5	0	2	3	2	3	2	3.5	2	3	2
14	3.5	2.5	2	2.5	2	2.5	2	3.5	2	2.5	2.5
20	3.5	2	2	3	2	3	2	3	2.5	3	2
27	3	3	2	3	3	2	2	3	2	2	3
34	2	2	3	2	3	3	2	2	2	2	2
40	2	2	2	2	3	2	2	2	2	2	2
50	2	3	3	2	3	3	2	3	3	3	3
60	2	3	3	2	3	2	3	2	3	2	2
70	2	3	2	2	2	2	2	2	2	3	2
84	2	3	2	2	3	2	3	2	3	3	3
101	2	3	3	2	3	3	3.5	3	3	3	3
116	2	3	3	3	3	3	3	2	3.5	3	3
129	2.5	3	3	3	3	3	3.5	3	3.5	3	3.5
Mean	2.5	2.5	2.5	2.4	2.7	2.6	2.5	2.6	2.6	2.7	2.5



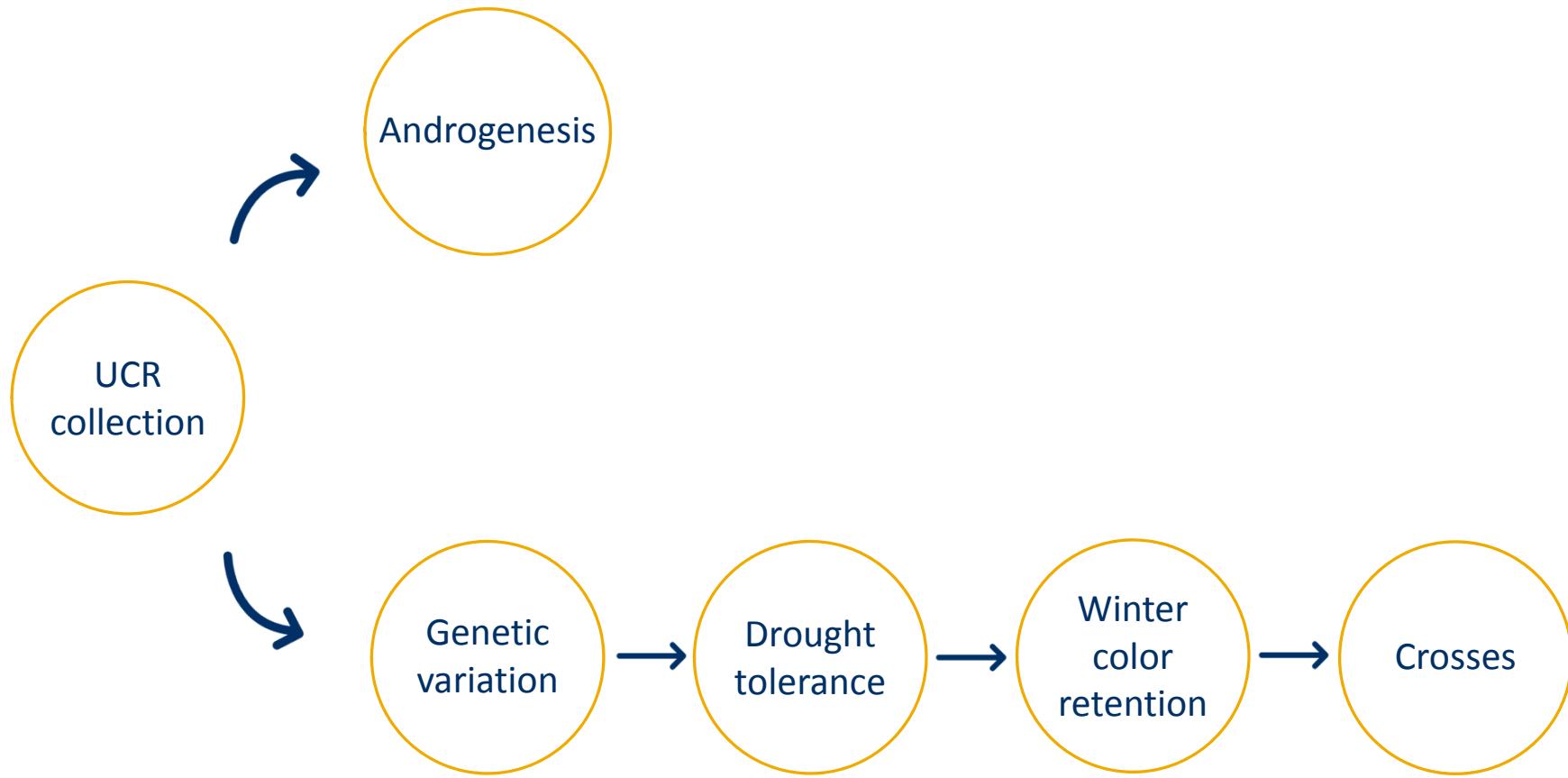


Winter color
retention





Crosses



Kikuyugrass breeding

