

Biolistic gun-mediated maize transformation summary

Dissection date: 2/16/2009
Bombardment date: 2/18/2009
Construct: pAHC25
***Zea mays* genotype:** Hi II F2 (from Wisconsin)
Embryo size (mm): 1.2 to 2.0
Embryo preculture: 2 days
Bombardment parameters: 650 psi, 6cm target, 6 mm gap, 0.6 micron gold
Pre/Post-bb treatments: 4 hr pre/20 hour post osmotic treatment

Student	Plate #	Ear #	# Immature zygotic embryos bombarded	# Bialaphos resistant callus events	# GUS expressing, bialaphos resistant callus events	<i>bar</i> transformation frequency (%)	<i>gus</i> (expressing) transformation frequency (%)
Alice	2	2	13	4	4	30.8%	30.8%
Annette	18	4	12	4	4	33.3%	33.3%
Ivan	14	3	10	3	1	30.0%	10.0%
Lindsey	8	6	13	3	3	23.1%	23.1%
Raechel	9	1	11	3	2	27.3%	18.2%
Sandra	17	5	15	4	1	26.7%	6.7%
Shu Hao	4	2	12	4	2	33.3%	16.7%
Tian	13	4	33	12	4	36.4%	12.1%
Yi Hsiang	1	2	14	3	3	21.4%	21.4%
Class average			133	40	24	30.1%	18.0%

**Only 4 of 12 putative events were *gus* assayed; *gus* tf % was likely higher

Agrobacterium-mediated maize transformation summary

Experiment date: 2/13/2009
Construct and strain: pTF102 (EHA101)
Zea mays genotype: Hi II (PTF greenhouse)
Embryo size: 1.2-2.0
Days and T (°C) Agro preculture: 3 days at 19°
Infection duration: 5 min
Co-cultivation duration and T (°C): 3 days at 20°

Student	Plate and ear #	# Embryos infected	# Embryos lost to contamination	# Embryos to selection	# Bialaphos resistant callus events	# GUS expressing, bialaphos resistant callus events	<i>bar</i> transformation frequency (%)	<i>gus</i> (expressing) transformation frequency (%)
Alice	2	37	12	25	4	4	16.0%	16.0%
Annette	7	21	0	21	4	4	19.0%	19.0%
Ivan	5	56	0	56	3	2	5.4%	3.6%
Lindsey	9	24	0	24	1	0	4.2%	0.0%
Raechel	8	65	0	65	2	2	3.1%	3.1%
Sandra	11	30	10	20	3	1	15.0%	5.0%
Shu Hao	6	32	0	32	3	1	9.4%	3.1%
Tian	10	29	1	28	4	4	14.3%	14.3%
Yi Hsiang	4	35	8	27	3	1	11.1%	3.7%
Class average		329	31	298	27	19	9.1%	6.4%