ANABP 01 Colour Development – Manjimup 2021 Steele Jacob – DPIRD, Australian National Apple Breeding Program

The following diagram shows the development of colour intensity of ANABP 01 apples weekly from February to May.

These measurements were recorded using a Nix QC Colour Sensor. This device is a Bluetooth® colour measurement tool used to scan the surface of an object or medium to give detailed colour descriptive data as well as a matching paint chip sample showing the actual colour scanned.

- 20 fruit were identified and labelled. Half on each side of the tree.
- A circle was drawn to identify the area to be scanned weekly to track colour development from the same point of the fruit.
- Fruit was colour scanned and a maturity test was conducted on fruit from the same trees weekly to establish maturity indicies including starch score.
- The chart below indicates the colour development on 14 separate apples (down the page) from the 10th of February for 15 weeks (across the page).
- The photo at the bottom was taken of the starch pattern and fruit colour at the time of the weekly maturity test.
- This crop was storage mature and harvested on the 20th of April.
- The tagged fruit for measurement was left on the tree along with sufficient fruit for further maturity testing until measurements ended on the 21st of May.











ANABP 01 Colour Development – Manjimup 2021

	10 th Feb	18 th Feb	25 th Feb	4 th Mar	11 th Mar	18 th Mar	26 th Mar	1 st Apr	9 th Apr	16 th Apr	23 rd Apr	29 th Apr	6 th May	13 th May	21 st May
1	#8F3D4D	#8A4047	#873B48	#843445	#823746	#783644	#783641	#723840	#6A3743	#612E3A	#5E3141	#582E3A	#50363A	#51373C	#47262E
	143, 61, 77	138, 64, 71	135,59,72	132, 52, 69	130, 55, 70	120, 54, 68	123, 54, 65	114, 56, 64	106, 55, 67	97, 46, 58	94, 49, 65	88, 46, 58	80, 54, 58	81, 55, 60	71, 38, 46
2	#873849	#833745	#843044	#803444	#7F3240	#79313F	#7A303E	#772F3D	#6E3441	#663440	#5C303D	#56353E	#4D3239	#4E313B	#47313A
	135, 56, 73	131, 55, 69	132, 48, 68	128, 52, 68	127, 50, 64	121, 49, 63	122, 48, 62	119, 47, 61	110, 52, 65	102, 52, 64	92, 48, 61	86, 53, 62	77, 50, 57	78, 49, 59	71, 49, 58
3	#8A3B49	#8A3545	#863245	#823041	#833242	#783240	#793040	#73333D	#71303D	#6A2C3D	#593636	#503039	#55303A	#4F2F37	#463337
	138, 59, 73	138, 53, 69	134, 50, 69	130, 48, 65	131, 50, 66	120, 50, 64	121, 48, 64	115, 51, 61	113, 48, 61	106, 44, 61	89, 54, 54	92, 48, 57	85, 48, 58	79, 47, 55	70, 51, 55
4	#863043	#823244	#832F41	#813143	#702A3D	#7A253D	#74303B	#752539	#682E34	#682638	#5F2D3B	#582935	#582939	#592C3A	#451E2A
	134, 48, 67	130, 50, 68	131, 47, 65	129, 49, 67	125, 42, 61	122, 37, 61	116, 48, 59	117, 37, 57	107, 46, 52	107, 38, 56	95, 45, 59	88, 41, 53	91, 41, 57	91, 44, 58	69, 30, 42
5	#8A3649	#8B3C49	#843B47	#823944	#843946	#7F3746	#7C3445	#763643	#773547	#723843	#683942	#673743	#5C363F	#5F3D47	#573037
	138, 54, 73	139,60,73	132, 59, 71	130, 57, 68	132, 57, 70	127, 55, 70	124, 52, 69	118, 54, 67	119, 53, 71	114, 56, 67	104, 57, 66	103, 55, 67	92, 54, 63	95, 61, 71	87, 48, 55
6	#914053	#8F444E	#8A3A4B	#843C48	#813B45	#7B3944	#733E3F	#763442	#6F3845	#63323B	#6A2A3D	#5C2E3A	#553639	#51383D	#50393D
	145, 64, 83	143, 68, 78	138, 58, 75	132, 60, 72	129, 59, 69	123, 57, 68	115, 62, 63	118, 52, 66	111, 56, 69	99, 50, 59	106, 42, 61	92, 46, 58	85, 54, 57	81, 56, 61	80, 57, 61
7	#8A3248	#863548	#882F48	#853246	#812840	#7C3042	#762B3F	#6F2F3D	#6C353F	#593831	#5E3638	#5F2F3D	#4F3039	∌522F3C	#4F2E3A
	138, 50, 72	134, 53, 72	136, 47, 72	133, 50, 70	129, 40, 64	124, 48, 66	118, 43, 63	111, 47, 61	108, 53, 63	89, 56, 49	94, 54, 56	95, 47, 61	79, 48, 57	82, 47, 60	79, 46, 58
8	#893047	#853545	#863046	#843444	#852E40	#7D303F	#783240	#77303F	#7A2F47	#69303C	#5D343C	#56323A	#562F3B	≠513238	#472932
	137, 48, 71	133, 53, 69	134, 48, 70	132, 52, 68	133, 46, 64	125, 48, 63	123, 50, 64	119, 48, 63	122, 47, 71	105, 48, 60	93, 52, 60	86, 50, 58	86, 47, 59	81, 50, 56	71, 41, 50
9	#883B4B	#873C4C	#833A47	#843A48	#7F3C45	#7A3D43	#7C3F43	#783A45	#713241	#723540	≇6A3944	#673740	#5D3942	# 5E383E	#5A343E
	139, 59, 75	135, 60, 76	131, 58, 71	132, 58, 72	127, 60, 69	122, 61, 67	124, 63, 67	123, 58, 69	113, 50, 65	114, 53, 64	106, 57, 68	103, 55, 64	93, 57, 66	94, 56, 62	90, 52, 62
10	#8A3848	#843843	#853145	#7F3044	#79283B	#763241	#74313F	#70303D	#6C2F3E	≉65303D	#60313D	#5F303C	#59303C	#522838	#513138
	138, 56, 75	132, 56, 67	133, 49, 69	127, 48, 68	121, 40, 59	118, 50, 65	116, 49, 63	112, 48, 61	108, 47, 62	101, 48, 61	96, 49, 61	95, 48, 60	89, 48, 60	82, 43, 56	81, 49, 56
11	#832643	#81233F	#781F38	#74233B	#74203A	#692238	#642639	#5A2A38	#4A2931	#532036	#452B34	#3E3033	#4A2437	#422735	#3B3127
	131, 38, 67	129, 35, 63	120, 31, 56	116, 35, 59	116, 32, 58	105, 34, 56	100, 38, 57	90, 42, 56	74, 41, 49	83, 44, 54	69, 43, 52	62, 48, 51	74, 36, 55	66, 39, 53	59, 49, 39
12	#873546	#883947	#823042	#70323F	#782236	#75303B	≭712E39	#6D303B	#652D3B	#5D1D2F	#4F2F39	#54313C	#4D3139	#4A2A36	#34081F
	135, 53, 70	136, 57, 71	130, 48, 66	124, 50, 63	123, 34, 54	117, 48, 59	113, 46, 57	109, 48, 59	101, 45, 59	93, 29, 47	79, 47, 57	84, 49, 60	77, 49, 57	74, 42, 54	52, 8, 31
13	#7C3442	#7A313E	#782E3D	#77303D	#702230	#692F38	#702938	#6A2B36	#5C2C37	#512834	#543A3E	#462E38	#453138	#502E3A	#3F1327
	124, 52, 66	122, 49, 62	120, 46, 61	119, 48, 61	112, 34, 48	105, 47, 56	112, 41, 56	106, 43, 54	92, 44, 55	81, 40, 52	84, 58, 62	70, 46, 56	69, 49, 56	80, 46, 58	63, 19, 39
14	#833745	#824047	#803A45	#7F3341	#703441	#6F3D40	#6E373F	#68393D	#503438	#503739	#533138	#51373C	#48333C	#513A3C	#3E222C
	131, 55, 69	130, 64, 71	128, 58, 69	127, 51, 65	124, 52, 65	111, 61, 64	110, 55, 63	104, 57, 61	80, 52, 56	93, 55, 57	83, 49, 56	81, 55, 60	75, 51, 60	81, 58, 60	62, 34, 44
MATURITY		0000	0000												

Harvest April 20th