Additional file 2. The position and pattern of introns within bZIP domain
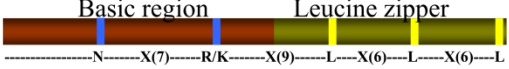
VvbZIP NO.　　　　Basic region　　Leucine zipper　　　　Patterns of intron

--------------------N--------X(7)-------R/K-------X(9)-------L----X(6)----L-----X(6)----L

VvbZIP08	RRQRRMIKNRESAARSRARKQ	AYTLELEMEVAKLKEANEEL	
VvbZIP45	RRQRRMIKNRESAARSRARKQ	AYTMELEAEVAKLKEKNEEL	
VvbZIP25	RRQRRMIKNRESAARSRARKQ	AYTVELEAELNQLKEENTLL	
VvbZIP43	RRQKRMIKNRESAARSRARKQ	AYTNHLEHEVHQLKKENDLL	
VvbZIP49	RRHKRLIKNRESAARSRARKQ	AYTNELELEVAHLIEENARL	
VvbZIP30	QRQRRMIKNRESAARSRERKQ	AYTVELESLVTHLEEENARL	
VvbZIP51	QKQRRMIKNRESAARSRERKQ	AYQVELESSAVRLEEENEQL	
VvbZIP18	RRLKRKIKNRESAARSRARKQ	AYHNELVSKVSRLEEENVRL	
VvbZIP34	RRQKRMIKNRESAARSRARKQ	AYTNELENKVSRLEEENERL	a
VvbZIP11	RRQKRMIKNWESATRSRARKQ	AYTNELENKVSRLEEENERL	
VvbZIP31	RROKRMIKNWESATHSRARKQ	AYTNELENKVSRLEEENERL	
VvbZIP19	RRQRRMIKNRESAARSRARKQ	AYTVELELELNQLKEENTKL	
VvbZIP46	KRQRRKQSNRESARRSRLRKQ	AECEELQSKVEILSNENHVL	
VvbZIP40	KRERRKQSNRESARRSRLRKQ	AETEELALKVESLNTENSVL	
VvbZIP03	KRERRKQANRESAKKSRLRKQ	AENEELRMRYETLNEENKAL	
VvbZIP04	KRQRRKQSNRESARRSRLRKQ	AECDELAQRADALKEENASL	
VvbZIP26	RRLRRVLANRESARQTIRRRQ	ALCGELSRKAADLSLENETL	
VvbZIP12	KRQKRKQSNRESARRSRLRKQ	AECEELQAKVETLSTENTAL	

VvbZIP28	K TLRRLAQNREAARKSRLRKK	AYVQQLESSRIKLTQLEQE-	
VvbZIP35	K TLRRLAQNREAARKSRLRKK	AYVQQLESSRMKLTQLEQEL	
VvbZIP01	K TLRRLAQNREAARKSRLRKK	AYVQQLECSQLKLTQLEQ--	b
VvbZIP27	K TLRRLAQNREAARKSRLRKK	AYVQQLENSRMKLTQLEQEL	
VvbZIP42	K TQRRLAQNREAARKSRLRKK	AYVQQLETSRLKLTELEQEL	
VvbZIP23	K VQRRLAQNREAARKSRLRKK	AYVQELESSRVKLM------	

VvbZIP17	KRAKR ILANRQSAARSKERKARYILELERKVQTLQTEATTLSAQLTLYQ	RDTT	
VvbZIP33	KRAKR ILANRQSAARSKERKARYILELERKVQTLQTEATTLSAQLTLFQ	RDTT	
VvbZIP16	KRAKR IWANRQSAARSKERKMRYIAELERKVQTLQTEATSLSAQLTLLQ	RDTN	c
VvbZIP05	KRAKR ILANRQSAARSKERKMRYISELEHKVQTLQTEATTLSAQLTLLQ	RDSA	
VvbZIP50	KRAKR ILANRQSAARSKERKIRYTNELERKVQTLQTEATTLSAQVTMLQ	RDTT	
VvbZIP48	KRAKR ILANRQSAARSKERKVRYMAELEHKVHTLQTETTTLSHLLTLLQ	RDSA	

VvbZIP21	KRARR MLSNRESARRSRRRKQEHLSELETQ VSQLGVENSSLLKRL	
VvbZIP38	KRVRR MLSNRESARRSRRRKQAHLTELETQ VAQLRLENSSLLKRL	d
VvbZIP09	KRMRR MVSNRESARRSRKRKQAHLADLELQ VEQLRGENASLYKQL	

VvbZIP29	KRVKR ILANRQSAQRSRVRKLQYISELERSVTSLQ TEVSVLSPR-	
VvbZIP52	KRVKR ILANRQSAQRSRVRKLQYISELERSVTSLQ TEVSALSPRV	
VvbZIP32	----- -------AQRSRVRKLQYIAELERNVQALK AEGSEVSAEL	e
VvbZIP54	----- -------AQRSRLRKLQYIAELEMSVQVLQ AEGCEISAAV	

VvbZIP10	KRLKR LLRNRVSAQQARERKKAYLNELEVRVKDLERKNSELEERL	f
VvbZIP41	KKRRR QLRNRDAAVRSRERKKTYVRDLELKSRYLESECRRLG---	

VvbZIP20	K TLRRLAQNREAARKSRLRKKAYVQQLESSRIKLTQLEQDL	g
VvbZIP53	KIRRRMIKNRESAARSRARKLA YDAQQQIEIAKLKKENEFL	h

VvbZIP02	RKQRRMISNRESARRSRMRKQKHLDELWSQVVRLRNENHSLIDKL	
VvbZIP39	RKQRRMISNRESARRSRMRKQKHLDELWSQVVWLRNENHQLIDKL	
VvbZIP44	-----MISNRESARRSRWRKKKHLENLSNEVNRLLVQNREYKHRL	
VvbZIP55	RKRRRMISNRESARRSRMRKQKHIENLRNQLNQLRIQNRELTNRL	
VvbZIP14	KKRKRMISNRESARRSRMRKQQHLDDLIKRKSELENQRLEIKRRI	
VvbZIP37	KKRRRMLSNRESARRSRMKKQKLSEDLISEVSRLQNLNKEIKQTI	
VvbZIP22	RKRKRMQSNRESAKRSRIRKQQHLDDLLSKAAQLQKENGQIAERI	i
VvbZIP07	RKRKRMISNRESARRSRMRKQKHLDDLMAQAAQLRKENSQIITSM	
VvbZIP13	RKRKRMLSNRESARRSRMRKQKHLDDMMAQMVHLRKENNRIL---	
VvbZIP47	RKRKRMLSNRESARRSRMRKQKHLDDLMAQVAQLRKENNEILSSI	
VvbZIP06	KSKKRPLGNREAVRKYREKKKARAASLEDEVVRLRSLNQQLLKRL	
VvbZIP36	-KVRRPSGNREAVRKYREKKKAHTAYLEEEVKKLRLLNQQLVKKL	
VvbZIP15	VLESRLLRNRVSAQQARERKKVYVNDLESRAQELQDRNSKLEEKI	
VvbZIP24	KKKARLMRNRESAQLSRQRKKHYVEELEEKIRSMHSTIQDLTGKI	