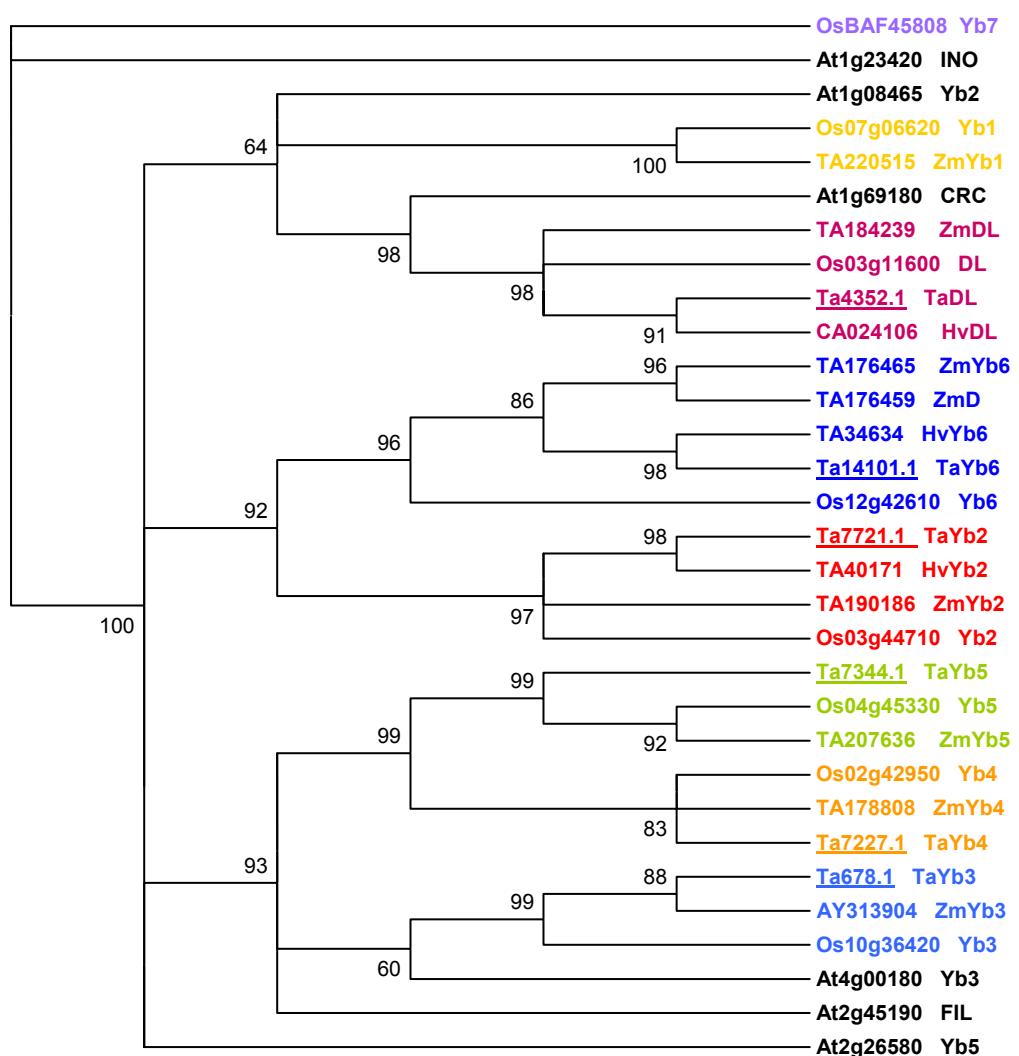


Figure S4 a. Phylogenetic tree of Yabby proteins. The tree was constructed from the rice and Arabidopsis sequences from the plnTFDB (Riano-Pachon et.al. 2007), with the addition of OsYb7 (BAF45808), the barley sequences CA024106, TA34634, TA40171, maize sequences TA207636, TA178808, AY313904, TA190186, TA176465, TA176459 TA220515, TA184239 and wheat proteins corresponding to probe sets Ta4352.1.S1 (AF545436), Ta14101.1.S1(TA64727), Ta7721.1.S1 (TA69349), Ta678.1.S1 (TA90793), Ta7227.1.S1 (CK205871). The tree was generated using the maximum likelihood method PHYML (Guindon and Gascuel 2003). Bootstrap values above 60% are shown.**b.** Amino acid alignment of the zinc finger and YABBY domains generated using CLUSTAL X. Gaps in the sequences and between domains are indicated by dashes.

a



b

OsBAF45808 Yb7 LRPFLGCVCCSFCITVLLVSVECSSVLRVVAVCGHCSGLSALV~NLPPSPV~NKPPEKRQRIKPSAYNCVKEEIKRIKSMBPNIDHKCAFSIAAKNWAHPRIQQKGRGSC
 At1g23420 INO LPPCICVQCFCITLVSVEFTSLSMVTVRCGHCTNLLSVNLMKASFI~NKPPEKRQRIKPSAYNCVKEEIKRIKSMBPNIDHKCAFSIAAKNWAHPRAHNKRAASDQ
 At1g69180 CRC QAEHLIVVRCSTICNTILAVGTLPLKRMDDTVCVRCGHCSNLISLT~TPPFLQG~VKPPEKKRQRIKPSAYNRFLRDEIQRINKAANPESMAHKCAFSIAAKNWAHPRAHNKRAASDQ
 Os03g11600 DL FSEHLCLYVRCYCCTVLAVGVECKRLMDTVCVRCGHCSNLISLT~TPPFLQG~VKPPEKKRQRIKPSAYNRFLRDEIQRINKAANPESMAHKCAFSIAAKNWAHPRAHNKRAASDQ
 Ta4352.1 TaDL ESEHLCLYVRCYCCTVLAVGVECKRLMDTVCVRCGHCSNLISLT~TPPFLQG~VKPPEKKRQRIKPSAYNRFLRDEIQRINKAANPESMAHKCAFSIAAKNWAHPRAHNKRAASDQ
 TA184239 ZmDL GSEHLCLYVRCYCCTVLAVGVECKRLMDTVCVRCGHCSNLISLT~TPPFLQG~VKPPEKKRQRIKPSAYNRFLRDEIQRINKAANPESMAHKCAFSIAAKNWAHPRAHNKRAASDQ
 CA024106 HvDL ESEHLCLYVRCYCCTVLAVGVECKRLMDTVCVRCGHCSNLISLT~TPPFLQG~VKPPEKKRQRIKPSAYNRFLRDEIQRINKAANPESMAHKCAFSIAAKNWAHPRAHNKRAASDQ
 Os07g06620 Yb1 TSEEVCVVNCYCNTILVWNENCSYNIVTVRCGHCTMVLSD~LAPFHQA~IRPPEKRQRVPSAYNRFLIKEEIQRIKATSNPEIISHREAFSAAAKNWAHPRIHFGLSVADG
 TA220515 ZmYb1 TSEFACVVNCYCNTILVWNENCSYNIVTVRCGHCTMVLSD~LSPFHQA~IRPPEKRQRVPSAYNRFLIKEEIQRIKATSNPEIISHREAFSAAAKNWAHPRIHFGLSVADG
 TA176459 ZmD PADHVCVHCSFCNTVLAVSVEGSMLNIVTVRCGHCSNLISVNLRALHQS~ARPPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 TA176465 ZmYb6 PADHVCVHCSFCNTVLAVSVEGSMLNIVTVRCGHCTNLLSVNLRBLHQS~RPAPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 Os12g42610 Yb6 PAEQCVVHCFNCNTILAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLHQS~ARPPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 TA34634 HvYb6 PAEQCVVHCFNCNTVLAVSVEGSMLNIVTVRCGHCTNLLSVNLRGOVHS~ARPPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 Ta14101.1 TaYb6 PAEQCVVHCFNCNTVLAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLVQA~ARPPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 Os03g44710 Yb2 APEEVCVVHCFNCNTILAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLVQS~VRPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 TA190186 ZmYb2 VPEEVCVVHCFNCNTILAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLVQS~VRPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 TA40171 HvYb2 PEEEVCVVHCFNCNTILAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLVQS~RPAPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 Ta7721.1 TaYb2 PEEEVCVVHCFNCNTILAVSVEGSMLNIVTVRCGHCTNLLSVNLRGLVQS~RPAPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 At1g08465 Yb2 SSERVCVHCSFCITLAVSVEYASLFLIVTVRCGHCTNLLSVN~IGVS1HQ~IRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 At2g26580 Yb5 ATEQLCYVHCNCFCITLAVSVECSSLEDIVTVRCGHCTNLLSVN~MAAL1QS~NRPPEKRQRVPSAYNCVKEEIQRIKANPDINHREAFSIAAKNWAHPVNIHFGLDDSGR
 At2g45190 FIL PSDHLCVVCNFCCITLAVSVEYASLFLIVTVRCGHCTNLLSVN~LRSY1LP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Os10g36420 Yb3 EQEQLCVVHCFNCFCITLAVSVESSLFIVTVRCGHCSLLAVN~LRGL1LP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 AY313904 ZmYb3 ASEQLCVVHCFNCFCITLAVSVESSLFIVTVRCGHCSLLAVN~LRGL1FP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Ta678.1 TaYb3 BSEQLCVVHCFNCFCITLAVSVESSLFIVTVRCGHCSLLAVN~LRGL1EP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 At4g00180 Yb3 STDQLCYVHCSFCITLAVSVESSLFIVTVRCGHCSLLAVN~LRGL1LP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Os02g42950 Yb4 ETEQLCVVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 TA178808 ZmYb4 PTEQLCYVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~NRPPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Ta7227.1 Yb4 PTEQLCVVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~LSAPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Os04g45330 Yb5 EQEQLCVVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~NRTSEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 Ta7344.1 Yb5 EQEQLCVVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~TKPEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ
 TA207636 ZmYb5 EQEQLCVVHCFNCFCITLAVSVECSSLFIVTVRCGHCSLLAVN~LRGL1LP~NKTSEKRQRVPSAYNRFLIKEEIQRIKANPDINHREAFSAAAKNWAHPVNIHFGLDPDQ