**Supplemental Materials Table 5. Differential expressed genes in cultivar PR39B29**

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| **ID** | **Name** | **BH** | **meanM** | **meanA** | **Gene product** |
| MZ00001648 | AW566370 | 0.016133335 | 2.75183151 | 7.988158308 | NA |
| MZ00003507 | BE130044 | 0.013891921 | -2.785514086 | 10.80585389 | NA |
| MZ00004486 | TC253575 | 0.049682283 | -2.422917241 | 9.353119581 | pathogenesis related protein-1 - maize {*Zea mays*;} ^|^GB|AAC25629.1|3290004|ZMU82200 pathogenesis related protein-1 {*Zea mays*;} |
| MZ00004711 | BM080031 | 0.019278631 | -2.713831389 | 9.7088997 | putative peroxidase {*Oryza sativa* (japonica cultivar-group);} ^|^GB|BAA96643.1|8468043|AP002482 unnamed protein product; Similar to Arabidopsis thaliana peroxidase ATP19a (X98805) {*Oryza sativa* (japonica cul-TRUNCATED- |
| MZ00013139 | AZM4\_69070 | 0.022134955 | -2.682380809 | 8.609035993 | contains ESTs AU064445(E30981),AU033124(S3631) similar to *Arabidopsis thaliana* chromosome 5, At5g44680 unknown protein {*Oryza sativa* (*japonica* cultivar-group);} |
| MZ00013532 | TC255153 | 0.002543002 | 3.170330016 | 11.7699957 | Phosphoenolpyruvate carboxykinase [ATP] (EC 4.1.1.49) (PEPcarboxykinase) (Phosphoenolpyruvate carboxylase) (PEPCK). {*Zea mays*;} ^|^GB|BAA36483.1|5672673|AB018744 phosphoenolpyruvate carboxykinase {*Zea mays*;}-TRUNCATED- |
| MZ00014008 | TC260104 | 0.012623595 | -2.811178625 | 10.00082487 | Farnesyl pyrophosphate synthetase (FPP synthetase) (FPS) (Farnesyldiphosphate synthetase) [Includes: Dimethylallyltransferase(EC 2.5.1.1); Geranyltranstransferase (EC 2.5.1.10)]. {*Zea mays*;} ^|^PIR|T03291|T0-TRUNCATED- |
| MZ00014434 | TC260325 | 0.000129937 | 3.751106577 | 10.05396971 | hypothetical protein At2g38110 [imported] - *Arabidopsis thaliana* {*Arabidopsis thaliana*;} ^|^GB|AAM47976.1|21387145|AY114657 unknown protein {*Arabidopsis thaliana*;} ^|^GB|AAL32799.1|17065290|AY062721 Unknown -TRUNCATED- |
| MZ00015899 | TC259585 | 0.006358762 | 2.965902453 | 12.76585935 | cinnamoyl CoA reductase - maize {*Zea mays*;} ^|^GB|CAA74071.1|2239260|ZMCCRGENE cinnamoyl CoA reductase {*Zea mays*;} |
| MZ00016581 | AZM4\_21980 | 0.049385887 | 2.472624651 | 11.35623272 | NOD26-like membrane integral protein ZmNIP2-1 {*Zea mays*;} |
| MZ00017520 | TC259837 | 0.010923079 | 2.844940859 | 12.08245555 | unknown protein {*Oryza sativa* (japonica cultivar-group);} |
| MZ00017851 | TC263371 | 0.007998279 | 2.917566485 | 13.39381452 | O-methyltransferase ZRP4 (EC 2.1.1.-) (OMT). {*Zea mays*;} ^|^PIR|JQ2268|JQ2268 O-methyltransferase (EC 2.1.1.-) - maize {*Zea mays*;} ^|^GB|AAA18532.1|404070|MZEOMT O-methyltransferase {*Zea mays*;} |
| MZ00019060 | TC251990 | 0.049385887 | 2.467309502 | 8.997125503 | putative syntaxin SYP111 {*Oryza sativa* (japonica cultivar-group);} |
| MZ00022590 | TC256960 | 0.049682283 | 2.418472846 | 9.702906078 | putative NAC domain protein NAC1 {*Oryza sativa* (japonica cultivar-group);} ^|^GB|BAD03222.1|38636961|AP004589 putative NAC domain protein NAC1 {*Oryza sativa* (japonica cultivar-group);} |
| MZ00022876 | TC254729 | 0.032123812 | 2.580961628 | 9.597265501 | hypothetical protein {*Oryza sativa* (japonica cultivar-group);} |
| MZ00023132 | TC267941 | 0.049614723 | 2.449509053 | 9.122439177 | DUR3 {*Oryza sativa* (japonica cultivar-group);} ^|^GB|AAP55189.1|31433710|AE017123 putative urea active transport protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|AAG46170.1|12039384|AC018727 putative -TRUNCATED- |
| MZ00023411 | TC258611 | 0.049385887 | 2.458064533 | 11.87385832 | 22 kDa drought-inducible protein {*Saccharum* hybrid cultivar;} ^|^GB|BAB68268.1|15667623|AB071694 drought inducible 22 kD protein {*Saccharum officinarum*;} |
| MZ00026598 | TC272701 | 0.002733806 | -3.138709306 | 8.385784504 | NA |
| MZ00026737 | TC272703 | 0.034951693 | 2.552428577 | 11.62432469 | peroxidase {*Zea mays*;} |
| MZ00029223 | TC253998 | 0.049385887 | -2.469323736 | 11.38138719 | putative heat shock protein hsp22 precursor {*Oryza sativa* (japonica cultivar-group);} |
| MZ00029584 | TC213104 | 0.049682283 | 2.415941463 | 8.882360354 | arogenate dehydrogenase {*Arabidopsis thaliana*;} |
| MZ00030597 | TC254547 | 0.045608153 | 2.500276217 | 10.72619731 | hypothetical protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|BAD09400.1|42408243|AP004462 hypothetical protein {*Oryza sativa* (japonica cultivar-group);} |
| MZ00031971 | TC249091 | 0.049682283 | -2.414466039 | 8.30601041 | chloroplast RelA homologue 1 {*Oryza sativa* (japonica cultivar-group);} |
| MZ00032181 | TC256231 | 0.027204005 | 2.623466647 | 9.141974431 | unknown protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|BAD33551.1|50726026|AP005551 unknown protein {*Oryza sativa* (japonica cultivar-group);} |
| MZ00032300 | TC267215 | 0.032123812 | -2.578920008 | 8.938059247 | NA |
| MZ00032919 | TC275843 | 0.002260487 | 3.24228398 | 11.79219444 | putative metacaspase, having alternative splicing products {*Oryza sativa* (japonica cultivar-group);} |
| MZ00037107 | BM380133 | 0.049682283 | 2.414317539 | 10.50393443 | NA |
| MZ00039384 | CD999219 | 0.003868766 | 3.053696635 | 12.08876037 | NA |
| MZ00041297 | TC258767 | 0.027204005 | 2.626008085 | 12.58611071 | NA |
| MZ00041306 | TC258637 | 0.049682283 | 2.425199198 | 12.43862438 | putative ASR2 {*Oryza sativa* (japonica cultivar-group);} |
| MZ00041333 | TC249511 | 0.008256155 | 2.899706289 | 13.36644993 | legumain-like protease {*Zea mays*;} |
| MZ00041334 | TC192088 | 0.032123812 | 2.573538496 | 13.11130824 | C13 endopeptidase NP1 precursor {*Zea mays*;} |
| MZ00041500 | AZM4\_134720 | 0.002160929 | 3.287279627 | 11.28065105 | ESTs AU078183(C62904),C73912(E21020) correspond to a region of the predicted gene. Similar to water stress inducible protein (U74296) {*Oryza sativa* (japonica cultivar-group);} |
| MZ00041708 | TC193433 | 0.049385887 | 2.455886831 | 10.296384 | contains EST C99107(E4452) unknown protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|BAB90465.1|20161543|AP003725 contains EST C99107(E4452) unknown protein {*Oryza sativa* (japonica cultivar-group);} |
| MZ00042906 | TC269711 | 0.003868766 | 3.070249006 | 11.7173933 | r40g3 protein - rice {*Oryza sativa*;} ^|^GB|BAC83806.1|34394519|AP005167 r40g3 protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|CAA70175.1|1658315|OSR40G3 osr40g3 {*Oryza sativa* (indica cultivar-group);-TRUNCATED- |
| MZ00042908 | TC269712 | 0.000129937 | 3.69588019 | 11.73932564 | r40g3 protein - rice {*Oryza sativa*;} ^|^GB|BAC83806.1|34394519|AP005167 r40g3 protein {*Oryza sativa* (japonica cultivar-group);} ^|^GB|CAA70175.1|1658315|OSR40G3 osr40g3 {*Oryza sativa* (indica cultivar-group);-TRUNCATED- |
| MZ00043603 | TC258422 | 0.049682283 | 2.440130314 | 9.748619496 | aspartic proteinase {*Oryza sativa* (japonica cultivar-group);} |
| MZ00044067 | TC272779 | 0.002420877 | 3.202355349 | 10.69218418 | NA |
| MZ00056611 | TC254030 | 0.022909948 | -2.668023701 | 12.02370141 | NA |

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