

10.1071/FP16194_AC

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Supplementary Material: *Functional Plant Biology*, 2017, 44(3), 312–323.

Supplementary Material

Distinct growth and physiological responses of *Arabidopsis thaliana* natural accessions to drought stress and their detection using spectral reflectance and thermal imaging

Karel Klem^{A,C}, Kumud B. Mishra^A, Kateřina Novotná^{A,B}, Barbora Rapantová^{A,B}, Petra Hodaňová^{A,B}, Anamika Mishra^A, Daniel Kováč^A and Otmar Urban^A

^AGlobal Change Research Institute CAS, Bělidla 986/4a, 603 00 Brno, Czech Republic.

^BMendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic.

^CCorresponding author. Email: klem.k@czechglobe.cz

Table S1. List of vegetation indices used in the study, the formulae for their calculation, and references

| <i>Vegetation index</i> | <i>Equation</i> | <i>Reference</i> |
|-------------------------|---|-----------------------------------|
| ANMB ₆₅₀₋₇₂₅ | Area under curve (650 - 725nm) normalised to maximal band depth | Malenovský <i>et al.</i> (2006) |
| NDVI | $NDVI = (R_{780} - R_{670}) / (R_{780} + R_{670})$ | Rouse <i>et al.</i> (1974) |
| NDGI | $NDGI = (R_{780} - R_{550}) / (R_{780} + R_{670})$ | Klem <i>unpublished</i> |
| NRERI | $NRERI = (R_{780} - R_{720}) / (R_{780} - R_{680})$ | Klem <i>et al.</i> (2014) |
| RDVI | $RDVI = (R_{800} - R_{670}) / \sqrt{(R_{800} + R_{670})}$ | Rougean & Breon (1995) |
| MSR | $MSR = ((R_{780} / R_{670}) - 1) / \sqrt{(R_{780} / R_{670}) + 1}$ | Chen (1996) |
| MTVI1 | $MTVI1 = 1.2 * [1.2 * (R_{800} - R_{550}) - 2.5 * (R_{670} - R_{550})]$ | Haboudane <i>et al.</i> (2004) |
| MCARI1 | $MCARI1 = 1.2 * [2.5 * (R_{800} - R_{670}) - 1.3 * (R_{800} - R_{550})]$ | Haboudane <i>et al.</i> (2004) |
| TCARI | $TCARI = 3 * [(R_{700} - R_{670}) - 0.2 * (R_{700} - R_{550}) * (R_{700} / R_{670})]$ | Haboudane <i>et al.</i> (2002) |
| OSAVI | $OSAVI = (1 + 0.16) * (R_{800} - R_{670}) / (R_{800} + R_{670} + 0.16)$ | Rondeaux <i>et al.</i> (1996) |
| TCARI/OSAVI | $TCARI/OSAVI$ | Haboudane <i>et al.</i> (2002) |
| Greenness Index G | $G = (R_{554}) / (R_{677})$ | Smith <i>et al.</i> (1995) |
| TVI | $TVI = 0.5 * [120 * (R_{750} - R_{550}) - 200 * (R_{670} - R_{550})]$ | Broge & Leblanc (2000) |
| ZM | $ZM = (R_{750}) / (R_{710})$ | Zarco-Tejada <i>et al.</i> (2001) |
| SRPI | $SRPI = (R_{430}) / (R_{680})$ | Peñuelas <i>et al.</i> (1995) |
| NPQI | $NPQI = (R_{415} - R_{435}) / (R_{415} + R_{435})$ | Barnes <i>et al.</i> (1992) |
| PRI | $PRI = (R_{531} - R_{570}) / (R_{531} + R_{570})$ | Gamon <i>et al.</i> (1992) |
| NPCI | $NPCI = (R_{680} - R_{430}) / (R_{680} + R_{430})$ | Peñuelas <i>et al.</i> (1994) |
| SIPI | $SIPI = (R_{800} - R_{450}) / (R_{800} + R_{650})$ | Peñuelas <i>et al.</i> (1995) |
| VOG3 | $VOG3 = (R_{734} - R_{747}) / (R_{715} + R_{720})$ | Zarco-Tejada <i>et al.</i> (1999) |
| VOG2 | $VOG2 = (R_{734} - R_{747}) / (R_{715} + R_{726})$ | Zarco-Tejada <i>et al.</i> (1999) |
| GM1 | $GM1 = (R_{750}) / (R_{550})$ | Gitelson & Merzlyak (1997) |
| GM2 | $GM1 = (R_{750}) / (R_{700})$ | Gitelson & Merzlyak (1997) |