

Table 1 Suppl. Overview of abundant proteins of plants in response to drought and salinity stresses.

Plant	Stress	Abundant proteins	References
<i>Arabidopsis thaliana</i>	drought	ATP synthase, cytochrome <i>c</i> oxidase, lipid transfer protein, NADH-ubiquinone oxidoreductase, prefoldin, ribosomal protein, tubulin folding cofactor A, non-catalytic subunit of nuclear DNA-dependent RNA polymerases, ribosomal RNA-processing protein	(Alqurashi <i>et al.</i> 2018)
<i>Nicotiana tabacum</i>	drought	biological processes, molecular functions, cellular components	(Chen <i>et al.</i> 2019)
<i>Populus cathayana</i>	drought	HSPs, enzymes related to redox homeostasis	(Xiao <i>et al.</i> 2009)
<i>Lathyrus sativus</i>	salinity	metabolism, signal transduction, protein biogenesis and degradation, cell defense and rescue	(Chattopadhyay <i>et al.</i> 2011)
<i>Lathyrus sativus</i>	drought	sugar metabolism, amino acid synthesis, antioxidant reactions, cell defense	(Rathi <i>et al.</i> 2018)
<i>Agrostis stolonifera</i>	drought	thiamine metabolic process, calcium-sensing receptor	(Xu and Huang 2018)
<i>Triticum aestivum</i>	salinity	ion-transport, metabolic pathway, protein synthesis and defense responsive	(Singh <i>et al.</i> 2017)
<i>Triticum aestivum</i>	drought, salinity	signal transduction, transcription regulation, cell defense, carbon and nitrogen metabolism, photosynthesis	(Peng <i>et al.</i> 2009)
<i>Triticum aestivum</i>	salinity	Mn-superoxide dismutase, cysteine synthase, nucleotide diphosphate kinase, and the voltage-dependent anion channel	(Jacoby <i>et al.</i> 2010)
<i>Triticum durum</i>	salinity	primary metabolism and production of energy, protein metabolism and cellular defense mechanisms	(Capriotti <i>et al.</i> 2014)
<i>Triticum durum</i>	drought	energy metabolism, information storage and processing, sugar metabolism, amino acid metabolism, cellular processes	(Budak <i>et al.</i> 2013)
<i>Brassica napus</i>	salinity	oxidative stress, energy production, electron transport, translation, photosynthesis	(Bandehagh <i>et al.</i> 2011)
<i>Brassica napus</i>	drought	metabolism, protein folding and degradation, signaling, photosynthesis, protein synthesis, stress and defense	(Koh <i>et al.</i> 2015)
<i>Brassica napus</i>	salinity	metabolism, photosynthesis, glyceraldehyde-3-phosphate dehydrogenase	(Das <i>et al.</i> 2016)
<i>Sorghum bicolor</i>	drought	RuBisCO regulation, electron transport, Calvin cycle, carbon fixation	(Jedrowski <i>et al.</i> 2014)
<i>Sorghum bicolor</i>	salinity	putative sialin, putative inorganic pyrophosphatase, RNA binding protein, and serine/threonine protein kinase	(Kumar Swami <i>et al.</i> 2011)
<i>Sorghum bicolor</i>	salinity	energy balance, metabolism, chaperons	(Kumar Swami <i>et al.</i> 2011)
<i>Beta vulgaris</i>	salinity	photosynthesis, metabolism, stress and defense, protein synthesis, signal transduction	(Jain <i>et al.</i> 2006)
<i>Arachis hypogaea</i>	salinity	late embryogenesis abundant protein, calcium ion binding protein, sucrose synthase isoform 1, 17.3 kDa heat shock protein, structural maintenance of chromosome proteins, signaling proteins, photosynthetic protein	(Thangella <i>et al.</i> 2018)
<i>Zea mays</i>	salinity	chloroplast proteins, ferredoxin NADPH reductase, FtsH-like protein	(Zörb <i>et al.</i> 2009)
<i>Zea mays</i>	salinity	fructokinase, UDP-glucosyl transferase BX9, 2-cis-peroxiredoxin, isocitrate-dehydrogenase, calmodulin, maturase, a 40-S-ribosomal protein	(Zörb <i>et al.</i> 2010)
<i>Zea mays</i>	drought	chlorophyll <i>a-b</i> binding protein, chloroplastic glycerophosphodiester phosphodiesterase GDPD5, U2 snRNP auxiliary factor large subunit, U ubiquitin carboxyl-terminal, thioredoxin-like protein CDSP32 chloroplastic alpha-dioxygenase, terpene synthase 7, AAA-ATPase ASD mitochondrial	(Zenda <i>et al.</i> 2018)
<i>Cucumis sativus</i>	salinity	metabolism, energy and transport	(Du <i>et al.</i> 2010)
<i>Cucumis sativus</i>	salinity	biosynthesis of secondary metabolites, glutathione metabolism pathway	(Du <i>et al.</i> 2019)
<i>Solanum tuberosum</i>	salinity	photosynthesis, protein synthesis-related proteins, osmotin-like proteins, TSI-1 protein, heat-shock proteins, protein inhibitors, calreticulin	(Aghaei <i>et al.</i> 2008)
<i>Solanum tuberosum</i>	drought	protection of photosynthesis and mitochondria, regulation of the signal transduction, regulation of plant tissue N and C transport	(Zhang <i>et al.</i> 2013)
<i>Lycopersicon esculentum</i>	salinity	photosystem II, Rubisco, superoxide dismutase (SOD)	(Chen <i>et al.</i> 2009)
<i>Lycopersicon esculentum</i>	drought	chloroplast proteins, energy-related functional proteins	(Tamburino <i>et al.</i> 2017)
<i>Lycopersicon esculentum</i>	drought	protein structure maintenance, metabolism, secretion, translation, biosynthesis, signal transduction, degradation, photosynthesis	(Lin <i>et al.</i> 2016)
<i>Puccinellia tenuiflora</i>	salinity	photosynthesis, stress and defense, sugar and energy metabolism, protein metabolism, signaling, membrane transport	(Yu <i>et al.</i> 2011)
<i>Thellungiella salsuginea</i>	salinity	photosynthesis, energy metabolism, stress response	(Pang <i>et al.</i> 2010)
<i>Suaeda salsa</i>	salinity	disease/defense, photosynthesis, energy production, material transport, signal transduction	(Li <i>et al.</i> 2011)

<i>Aster tripolium</i>	salinity	protective heat shock protein, beta ATPase subunit, ATPase	(Geissler <i>et al.</i> 2010)
<i>Salicornia europaea</i>	salinity	energy production, ion homeostasis	(Wang <i>et al.</i> 2009)
<i>Bruguiera gymnorhiza</i>	salinity	photosynthesis, respiration and energy metabolism, Na ⁺ compartmentalization, protein folding and assembly, signal transduction	(Wang <i>et al.</i> 2014)
<i>Physcomitrella patens</i>	salinity	defense, protein folding, ionic homeostasis	(Wang <i>et al.</i> 2008b)
<i>Mesembryanthemum crystallinum</i>	salinity	tonoplast proteins, vacuolar H ⁺ -ATPase	(Barkla <i>et al.</i> 2009)
<i>Dunaliella salina</i>	salinity	surface coat proteins, lipid-metabolizing enzymes, ion transporters, small GTP-binding proteins, heat shock proteins	(Katz <i>et al.</i> 2007)
<i>Pistacia vera</i>	salinity	ribonucleoside-diphosphate reductase small chain, polcalcin Phl p 7-like and Golgi subfamily A member	(Jamshidi Goharrizi <i>et al.</i> 2020)
<i>Pistacia vera</i>	drought	fibroin heavy chain-like, thylakoid lumenal 19 kDa protein, superoxide dismutase isoform X2, vesicle-associated membrane protein 722-like	(Pakzad <i>et al.</i> 2019)
<i>Glycine max</i>	drought	transcription regulator cold shock protein, serine hydroxymethyl transferase, glutamyl-tRNA amido transferase subunit B, 50S ribosomal protein L3, GroEL1 chaperonin, heat-shock protein 70, nitrogenase Fe protein, nitrogenase Fe-Mo α and β -chain, malate dehydrogenase, succinyl-CoA synthetase β -chain, GroEL3 chaperonin, ATP synthase β -chain, FixU nitrogen fixation protein, DNA-directed RNA polymerase α -chain, ATP-binding cassette transporter ATP- binding protein, aconitate hydratase, histone-like protein	(Larrainzar <i>et al.</i> 2007)