

SUBJECT INDEX

- Albizia amara* 372
- leaf explants 372
- regeneration 372
Andrographis paniculata 60
- andrographilide 60
- nitrogen 60
Antioxidant systems 115, 138, 264
- ascorbic acid 138
- cassia 264
- catalase 264
- kiwifruit 138
- mango 115
- peroxidase 115, 264
- superoxide dismutase 115, 264
ATPase 246
- Na⁺- K⁺ stimulated ATPase 246
- wheat 246
Auxins 96
- nodulation 96
- rice 96
- yield 96
Azospirillum 96
- auxins 96
- nodulation 96
- rice 96
- yield 96
Azotobacter 89, 171
- growth 89
- mulberry 171
- sugarcane 89
- Baliospermum axillare* 125
- micropropagation 125
Barley 175
- dormancy 175
- hydration 175
- seed germination 175
- temperature 175
Biomass 392
- chickpea 392
- radiation interception 392
- radiation utilization efficiency 392
Blue green algae 23
- growth 23
- pigments 23
Brassica 53, 133, 155, 201, 349
- growing degree days 344
- growth 53, 155
- heliothermal units 349
- irrigation 53
- nitrogen allocation 201
- phenology 349
- pollen germination 133
- pollen tube length 133
- rapeseed mustard 53, 201
- salt stress 133
- sulphur 155
- yield 155
Brassinosteroids 93, 313
- brassinolide 93
- chlorophyll 313
- groundnut 313
- growth 93
- nitrogenase 313
- quality 93
- tobacco 93
- yield 93
Brinjal 17, 189
- antitranspirants 189
- areoles 17
- chromium 17
- kaolin 189
- stomatal index 17
- transpiration 189
- trichomes 17
- veins 17
- Cajanus cajan* 229
- α -galactoside 229
- processing methods 229
Carotenoides 23
- blue green algae 23
Castor 63, 70, 319
- ideotype 63
- moisture stress 319
- nipping 70

SUBJECT INDEX

- spacing 70
- yield 63
- Catharanthus roseus* 392
- alkaloids 392
- salt tolerance 392
- Chickpea 12, 28, 165, 205, 335, 388
- biomass 388
- growth correlations 205
- harvest index 12, 335
- *in vitro* regeneration 28
- irrigation 12, 335
- lateral bud outgrowth 205
- leaf nitrogen 12, 335
- nitrogenase activity 165
- phosphorus 165
- potassium 165
- protease 12
- radiation interception 388
- radiation utilization efficiency 388
- rubisco 335
- selective organectomy 205
- soluble protein 335
- water stress 388
- Chlorophyll 150, 199, 214, 359
- chlorophyll stability index 359
- clusterbean 150
- fluorescence 214
- groundnut 313, 359
- rice 199
- tea 214
- Chromium 17, 23, 38, 129
- areoles 17
- blue green algae 23
- brinjal 17
- chlorophyll 23, 38
- rice 38
- stomatal index 17
- trichomes 17
- veins 17
- wheat 129
- Clusterbean 150, 402
- chlorophyll 150
- growth 150
- phosphorus 150
- proline 150
- protein banding pattern 402
- varietal identification 402
- water stress 150
- Cold tolerance 307
- nitrate uptake 307
- wheat 307
- Cotton 79
- leaf area 79
- phonology 79
- specific leaf weight 79
- Cowpea 160, 354
- leghemoglobin 354
- nitrogenase 354
- nitrogen fixation 354
- photosynthesis 160
- seed yield 160
- stomatal conductance 160
- transpiration 160
- ureides 354
- Cropping system 259
- biomass 259
- growth analysis 259
- wheat equivalent yield 259
- Cryptomeria japonica* 316
- germination 316
- gibberellic acid 316
- temperature 316
- Dacus carota* 223
- enzyme activity 223
- field emergence 223
- invigoration 223
- seed priming 223
- Dormancy 175
- barley 175
- hydration 175
- temperature 175
- tomato 175
- turnip 175
- Dry matter 34, 129
- *Phaseolus vulgaris* 34
- wheat 129
- Ethylene 82, 115
- floral malformation 82
- mango 82, 115
- ripening 115

SUBJECT INDEX

- Fluorescence emission 44
 - rice 44
Fusarium 1
 - cell lines 1
 - gladiolus 1
 - resistance 1
- Gibberellic acid 297, 316
 - *Cryptomeria japonica* 316
 - germination 316
 - mothbean 297
 - plant water relations 297
 - salinity
- Gladiolus 1
 - cell lines 1
 - *Fusarium* 1
 - resistance 1
- Groundnut 186, 313, 359, 377, 383
 - acid phosphatase 186
 - ash content 359
 - benzyladenine 359
 - brassinosteroids 313
 - calcium 186
 - chlorophyll 313
 - chlorophyll stability index 359
 - drought 383
 - drought tolerance 359
 - growth 377
 - intercropping 377
 - membrane stability index 359
 - nitrogenase activity 313
 - peroxidase 359
 - putrescine 383
 - soluble protein 313
 - sugars 313
 - water stress 186
 - yield 359
- Growth 23, 53, 89, 193, 253, 377
 - blue green algae 23
 - clusterbean 150
 - kiwifruit 138
 - mint 193
 - potato 181
 - rapeseed mustard 53
 - rice 253
 - sugarcane 89
 - sunflower 103, 377
 - tobacco 93
- Harvest index 12, 277
 - chickpea 12
 - irrigation 12
 - wheat 277
- Hydrolytic enzymes 6
 - *Moringa oleifera* Lam 6
 - chickpea 12
- Ideotype 63
 - castor 63
- Kinetin 287
 - clusterbean 287
 - nitrate reductase 287
 - photosynthesis 287
- Kiwifruit 138
 - ascorbic acid 138
 - fruit growth 138
- Leaf area 79, 199
 - cotton 79
 - rice 199
- Mango 82, 111, 115
 - Amrapali 82
 - ethylene 82, 115
 - floral malformation 82
 - pericarp 111
 - peroxidase 115
 - polyamines 111
 - respiration 115
 - seeds 111
- Micropropagation 125
 - *Baliospermum axillare*
- Mint 193
 - growth 193
 - shade 193

SUBJECT INDEX

Moisture stress 99, 150, 186, 214, 236, 264, 287, 292, 359, 383, 388

- acid phosphatase 186
- antioxidants 264
- biomass production 388
- calcium 186
- canopy temperature depression 329
- *Cassia* 264
- castor 319
- chickpea 388
- chlorophyll 150
- chlorophyll fluorescence 214
- chlorophyll stability index 359
- clusterbean 150, 287
- drought tolerance 236, 359
- groundnut 186, 359, 383
- growth 150
- internodal elongation 405
- leaf water potential 99, 292, 329
- membrane stability index 359
- nitrate reductase 287
- oxidative enzymes 405
- phosphorus 150
- photosynthesis 287
- potassium iodide 329
- proline 150
- protein profile 214
- putrescine 383
- radiation interception 388
- radiation utilization efficiency 388
- rice 236, 292
- RWC 99, 292, 329
- secondary traits 236
- stomatal resistance 292
- sugarcane 405
- tea 214
- wheat 99, 329
- yield 99

Moringa oleifera 6

- hydrolytic enzymes 6
- oxidative enzymes 6
- chemical composition 6

Mothbean 145, 297

- gibberellic acid 297
- growth 145
- proline 145

- salinity 297
- SOD 145
- specific ions 145

Mulberry 171

- *Azotobacter* 171
- VAM 171

Mungbean 241, 398

- amino acids 241
- benzylaminopurine 241
- IAA 241
- NAA 241
- regeneration 241, 398
- thidiazuran 398

Net assimilation rate 34

- *Phaseolus vulgaris* 34

Nitrate reductase 246, 287, 340

- clusterbean 287
- wheat 246, 340

Nitrogen 103, 201

- *Brassica* species 201
- growth 103
- nitrate uptake 219
- sugarcane 219
- sunflower 103

Nitrogenase 165, 313

- chickpea 165
- cowpea 354
- groundnut 313

Nodulation 96

- auxin 96
- *Azospirillum* 96
- rice 96

Okra 345

- fruit yield 345
- leaf excision 345
- photosynthesis 345
- seed abortion 345

Onion 411

- bioregulators 411
- quality 411
- storability 411
- yield 411

SUBJECT INDEX

- Oxidative enzymes 6
 - *Moringa oleifera* 6
 Oxidative stress 264
 - antioxidant systems 115, 264
 - peroxidase 264
 - superoxide dismutase 264
- Pennisetum* 145
 - growth 145
 - proline 145
 - SOD 145
 - specific ions 145
Phaseolus vulgaris 34
 - dry matter 34
 - net assimilation rate 34
 - nitrogen 34
 - plant density 34
 Phenology 74
 - cotton 74
 - mustard 349
 Phosphorus 103, 129, 150, 377
 - chickpea 165
 - chlorophyll 150
 - chromium 129
 - clusterbean 150
 - growth 103, 150
 - sunflower 103, 377
 - water stress 150
 - wheat 129
 - yield 103, 129
 Photosynthesis 44, 160, 253
 - clusterbean 287
 - cowpea 160
 - elevated CO₂ 253
 - okra 345
 - rice 44, 253
 Phycobillins 23
 - blue green algae 23
 Polyamines 111
 - mango 111
 - pericarp 111
 - seeds 111
 Potassium 103
 - chickpea 165
 - growth 103
 - sunflower 103
 - yield 103
 Potato 141, 181
 - growth 181
 - high temperature 141
 - little tubers 181
 - relative humidity 141
 - weight loss 141
 - yield 181
 Proline 145, 150
 - clusterbean 150
 - *Pennisetum* 145
Pseudomonas 89
 - growth 89
 - sugarcane 89
- Radish 302
 - root growth 302
 - zinc excess 302
 Regeneration 28
 - *Albizia amara* 372
 - chickpea 28
 - mungbean 341, 398
 Respiration 115, 310
 - mango 115
 - rose 310
 Rice 38, 44, 96, 199, 236, 253, 292, 323
 - AGPase 44
 - aromatic rice 199, 323
 - auxin 96
 - *Azospirillum* 96
 - chlorophyll content 38, 199
 - drought tolerance 236
 - elevated CO₂ 253
 - fluorescence emission 44
 - growth 155, 253
 - isozymes 323
 - leaf area 199
 - leaf water potential 292
 - non-aromatic 323
 - photosynthetic rate 44, 253
 - R WC 292
 - secondary traits 236
 - starch synthesis 44
 - stomatal resistance 292

SUBJECT INDEX

- storage proteins 323
- submergence stress 38
- sulphur 155
- water potential 38
- yield 44, 96, 199, 253
- Rose 310
 - cold storage 310
 - gamma irradiation 310
 - respiration 310
 - vase life 310
- Rust resistance 85
 - nutrients 85
 - soybean 85

- Salinity 297, 392
 - alkaloids 392
 - *Catharanthus roseus* 392
 - gibberellic acid 297
 - mothbean 297
 - salt tolerance 392
- Salt stress 133
 - *Brassica* 133
 - pollen germination 133
 - pollen tube growth 133
- Seed 175, 196, 270, 316, 364
 - barley 175
 - *Cryptomeria japonica* 316
 - gibberellic acid 316
 - seed germination 175, 196, 270, 316
 - seed moisture uptake 270
 - seed quality 364
 - seed weight 270
 - *Sesbania* 270
 - sunflower 364
 - temperature 175, 316
 - tomato 175
 - turnip 175
- Soybean 85
 - nutrients 85
 - rust resistance 85
- Specific leaf weight 79
 - cotton 79
- Spinacia* 74
 - morphophysiology 74
 - sewage waste water 74

- water use efficiency 74
- Stomatal index 17
 - brinjal 17
- Stomatal conductance 160
 - cowpea 160
 - rice 292
- Strawberry 196
 - growth regulators 196
 - runners 196
 - survival 196
- Sugarcane 89, 219, 405, 408
 - *Azotobacter* 89
 - chlorosis 408
 - growth 89
 - internodal elongation 405
 - moisture stress 405
 - nitrate uptake 219
 - oxidative enzymes 405
 - *Pseudomonas* 89
 - ratoon crop 219, 408
- Sulphur 155, 408
 - growth 155
 - mustard 155
 - rice 155
 - sugarcane 408
 - translocation 408
- Sunflower 103, 364, 377
 - growth 103, 377
 - intercropping 377
 - nitrogen 103
 - phosphorus 103
 - plant spacing 364
 - potassium 103
 - restorer line 364
 - seed quality 364
 - sowing dates 103
 - yield 103

- Tea 214
 - chlorophyll fluorescence 214
 - drought 214
 - protein profile 214
- Tobacco 48, 93
 - brassinolide 93
 - growth 93

SUBJECT INDEX

- nicotine 48
- quality 93
- reducing sugars 48
- topping 48
- yield 48, 93
- Tomato 175
 - dormancy 175
 - hydration 175
 - seed germination 175
 - temperature 175
- Transpiration 160, 189
 - antitranspirants 189
 - brinjal 189
 - cowpea 160
 - Kaolin 189
- Trigonella* 74
 - morphophysiology 74
 - sewage waste water 74
 - water use efficiency 74
- Turnip 175
 - dormancy 175
 - seed germination 175
 - temperature 175

- Ureides 354
 - cowpea 354
- UV-stress 264
 - cassia 264

- VAM 171
 - mulberry 171

- Water chestnut 369
 - leaf area 369
 - plant height 369
 - pond environment 369
 - yield 369
- Water potential 38, 99, 292
 - rice 38, 292
 - wheat 99
- Water use efficiency 74
 - *Spinacia* 74
 - *Trigonella* 74
- Wheat 99, 120, 129, 246, 277, 307, 329, 340
 - ATPase 246
 - canopy temperature depression 99, 329
 - chapati characteristics 120
 - chromium 129
 - cold tolerance 307
 - dry matter 129
 - harvest index 277
 - HMW glutenin 120
 - leaf water potential 99, 329
 - leaf weight ratio 277
 - moisture stress 99, 329
 - nitrate reductase 246, 340
 - nitrate uptake 307
 - photosynthesis 329
 - relative water content 99, 329
 - yield 99

- Yield 44, 53, 93, 96, 160, 181, 199, 345, 369, 411
 - castor 63, 70
 - cowpea 160
 - okra 345
 - onion 411
 - potato 181
 - rapeseed mustard 53
 - rice 44, 96, 199
 - sunflower 103
 - tobacco 48, 93
 - water chestnut 369
 - wheat 99

- Zinc 302
 - radish 302
 - root growth 302
 - zinc excess 302