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LIST OF ABBREVIATIONS

| | |
|------------------|---|
| °C | Degree Celsius |
| µg | Microgram |
| µl | Micro liter |
| µM | Micro molar |
| µmol | Milliliter |
| 4CH | 4-coumarate: coA ligase |
| ABTS | 2,2' -azino-di(3-ethylbenzthiazoline-6-sulfonate) |
| ANOVA | Analysis of variance |
| BAP | Benzylaminopurine |
| BE | <i>Bacillus subtilis</i> extract |
| BSA | Bovine serum albumin |
| C4H | Cinnamate-4-hydroxylase |
| CHS | Chalcone synthase |
| CT | Chitosan |
| DMSO | Dimethyl sulfoxide |
| DW | Dry weight |
| ELISA | Enzyme-linked immunosorbent assay |
| FW | Fresh weight |
| g | Gram |
| GC-MS | Gas chromatography-mass spectrometry |
| h | Hour |
| HCl | Hydrochloric acid |
| HPLC | High performance liquid chromatography |
| I.M. | Intramuscular |
| IBA | Indole-3-butyric acid |
| IC ₅₀ | The half inhibitory concentration |
| IgG | Immunoglobulin G |
| LB | Lysogeny broth |

LIST OF ABBREVIATIONS (Cont.)

| | |
|----------------|--|
| M | Molar |
| <i>M. alba</i> | <i>Morus alba</i> |
| MALDI-TOF | Matrix-assisted laser desorption/ionization time-of-flight |
| MALDI-TOF-MS | Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry |
| mg | Milligram |
| ml | Milliliter |
| min | Minute |
| MJ | Methyl jasmonate |
| mM | Millimolar |
| MS | Murashige and Skoog |
| MuA | Mulberroside A |
| n | Number of sample |
| NAA | 1-Naphthalene acetic acid |
| ND | Not detect |
| nm | Nanometer |
| nmol | Nanomol |
| OVA | Ovalbumin |
| PAb | Polyclonal antibody |
| PAL | Phenylalanine ammonia lyase |
| PBD | Potato dextrose broth |
| PBS | Phosphate buffered saline |
| PE | <i>Phoma</i> sp. Extract |
| r^2 | Linear correlation coefficients |
| rpm | Round per minute |
| RSD | Relative standard deviation |
| SA | Salicylic acid |
| STS | Stilbene synthase |

LIST OF ABBREVIATIONS (Cont.)

| | |
|--------|--------------------------------|
| TDZ | Thidiazuron |
| TE | <i>Trichoderma</i> sp. Extract |
| TLC | Thin layer chromatography |
| TPBS | PBS containing of 0.05 % Tween |
| UV | Ultraviolet |
| UV/VIS | Ultraviolet-visible |
| v/v | Volume by volume |
| YE | Yeast extract |