**Table 1.** Preferred nomenclature for siliceous species associated with plant silicon research

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| **Preferred name** | | | **Symbol** | **Description/definition** | **Other names used in literature** |
| Silicon | | | Si | The element silicon. Also a generic term used when silicon form/function not specified or for simplification. | Sometimes incorrectly used interchangeably with silica; caution should be taken to specify Si vs SiO2 |
| Silica | | | SiO2 | Silicon combined with oxygen (SiO2), often hydrated (SiO2.nH2O or SiO2.xH2O). It exists as several minerals and can be in solid or gel form, with a crystalline or amorphous structure. In plants, silica is amorphous and in discrete bodies it forms phytoliths. | Silicon dioxide |
|  | Dissolved silicon | | DSi | Silicon combined with oxygen and hydrogen, commonly represented as H4SiO4 or Si(OH)4 Found in the soil solution, rivers and oceans and is the form taken up by plants and animals. Many Si fertilisers dissolve to supply silicic acid. | Silicic acid  Ortho-silicic acid. |
|  | Biogenic silica | | BSi | Silica formed in plants and animals | Biosilica, sometimes used to describe PhSi when only plants are being discussed |
|  |  | Phytogenic silica | PhSi | Biogenic silica specifically produced in plants. Include phytoliths, but also smaller, less discrete deposits in plants. | Plant silica, phytoliths |
|  |  | Zoogenic silica | ZSi | Biogenic silica produced in animals, mainly diatoms. |  |
|  | Inorganic silicates | |  | SiO44- based materials with inorganics origins |  |
|  |  | Lithogenic silicates | LSi | Silicates originating from silicate minerals and crystals |  |
|  |  | Pedogenic silicates | PSi | Silicates formed in soils, often from amorphous silica |  |
|  | Amorphous silica | | ASi | Non-crystalline silica, from either a biogenic or pedogenic sources | At times used to mean BSi, but this is not recommended |
|  | Human appropriated biogenic silica | | HABSi | BSi in agriculture |  |