Supplementary Material

Annex 1: Collected names corresponding to the groups described in the standard vocabulary and summarized in Table 1, from a non-exhaustive literature survey.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Standard terminology** | **Identifier** | [F0200003](https://vocab.nerc.ac.uk/collection/F02/current/F0200003/) | [F0200002](https://vocab.nerc.ac.uk/collection/F02/current/F0200002/) | [F0200013](https://vocab.nerc.ac.uk/collection/F02/current/F0200013/) | [F0200004](https://vocab.nerc.ac.uk/collection/F02/current/F0200004/) | [F0200005](https://vocab.nerc.ac.uk/collection/F02/current/F0200005/) | [F0200015](https://vocab.nerc.ac.uk/collection/F02/current/F0200015/) | [F0200014](https://vocab.nerc.ac.uk/collection/F02/current/F0200014/) | [F0200006](https://vocab.nerc.ac.uk/collection/F02/current/F0200006/) | [F0200007](https://vocab.nerc.ac.uk/collection/F02/current/F0200007/) | [F0200008](https://vocab.nerc.ac.uk/collection/F02/current/F0200008/) | [F0200016](https://vocab.nerc.ac.uk/collection/F02/current/F0200016/) | [F0200010](https://vocab.nerc.ac.uk/collection/F02/current/F0200010/) | [F0200011](https://vocab.nerc.ac.uk/collection/F02/current/F0200010/) |
| **Common Vocabulary** | ***OraPicoProk*** | ***RedPicoProk*** | ***RedRedPico*** | ***RedPico*** | ***RedNano*** | ***RedRedNano*** | ***OraPico*** | ***OraNano*** | ***HsNano*** | ***RedMicro*** | ***OraMicro*** | ***HetHNA*** | ***HetLNA*** |
| Corresponding terminology in the literature | (Li and Wood, 1988) | *cyanobacteria* | *very small red fluorescing bodies* |  | *small eukaryotes* | *large eukaryote cells* |  |  |  |  |  |  |  |  |
| (Campbell and Vaulot, 1993) | *Synechococcus* | *Prochlorococcus,* |  | *Picoeukaryotes* |  |  |  |  |  |  |  |  |  |
| (Li et al., 1993) | Cyanobacteria/SYN | PRO |  | "Small" eukaryotes/PEUK | "Large" eukaryotes |  |  | cryptomonads |  |  |  | *Heterotrophic bacteria* |  |
| (Veldhuis et al., 1993) | *chroococcoid cyanobacteria* | *prochlorophytes* |  | *larger eukaryotic phytoplankton* | *larger eukaryotic phytoplankton* |  |  |  |  |  |  |  |  |
| (Li et al., 1994) | *CYA* | *PRO* |  | *SEUC* | *LEUC* |  |  |  |  |  |  |  |  |
| (Blanchot and Rodier, 1996) | *orange cyanobacteria* | *Prochlorophytes* |  | *red- fluorescing picoeukaryotes* |  |  |  |  |  |  |  |  |  |
| (Campbell et al., 1997) | *Synechococcus* | *Prochlorococcus* |  | *picoeucaryotes* | *3-20 µm Algea* |  |  |  |  |  |  |  |  |
| (Fiala et al., 1998) | Chroococcoid cyanobacteria |  |  | picoplankton |  |  |  |  |  |  |  |  |  |
| (Corzo et al., 1999) | *Synechococcus* | *Prochlorococcus-like* |  |  |  |  |  |  |  |  |  |  |  |
| (Marie et al., 1999) | Syn | Proc |  | Euk | Euk |  |  |  |  |  |  |  |  |
| (Veldhuis and Kraay, 2000) | *Synechococcus* |  |  | *pico-eukaryotes (PEUKs)* | *larger eukaryotes* |  |  |  |  |  |  | groupe A/B | group C |
| (Fouilland et al., 2001) | *cyanobacteria cells* |  |  | *small eukaryotes* | *large eukaryote cells* |  |  |  |  |  |  |  |  |
| (Casotti et al., 2003) | *Synechococcus* | *Prochlorococcus* |  | *picoeukaryotes* |  |  |  |  |  |  |  |  |  |
| (Gin et al., 2003) | *Synechococcus* | *Prochlorococcus* |  | *pico-eukaryotic phyto-plankton* | *large eukaryotic phytoplankton* |  |  | *cryptophyte* |  |  |  |  |  |
| (Sieracki et al., 2004) | *PE SYN* |  | *PC SYN* | *<4 µm eukaryotes* |  |  |  |  |  |  |  |  |  |
| (Martínez-Martínez et al., 2006) | *Synechococcussp.* |  |  | *picoeukaryotes* | *nanoeukaryote* |  |  | *cryptophyte* | *E. huxleyi* |  |  |  |  |
| (Tarran et al., 2006) |  |  |  | *PEUK* | *NEUK* |  |  | *CRYPTO* | *COCCO* |  |  |  |  |
| (Grob et al., 2007) | *Synechococcus* | *Prochlorococcus* |  | *picophytoeukaryotes* |  |  |  |  |  |  |  | *HDNA* | *LDNA* |
| (Schapira et al., 2009) |  |  |  |  |  |  |  |  |  |  |  | *HDNA* | *LDNA* |
| (Stenuite et al., 2009) | *Synechococcus* |  |  | *PicoEuk1* | *PicoEuk2* |  |  |  |  |  |  |  |  |
| (Lin et al., 2010) | *Syn1, Syn2* | *Pro* |  | *Euk* | *Euk* |  |  | *Euk* |  |  |  |  |  |
| (Metfies et al., 2010) |  |  |  |  |  |  | Pico cryptophytes |  |  |  |  |  |  |
| (Thomas et al., 2010) | *syn* | *Prochl* |  | *Peuk* | *Nan* |  |  |  |  |  |  |  |  |
| (Bec et al., 2011) | *PE-CYAN* |  | *PC-CYAN* | *PEUK* | *NANO* |  |  |  |  |  |  |  |  |
| (Bratbak et al., 2011) | *Synechococcus* |  |  | *autotrophic picoeukaryotes* | *autotrophic nanoflagellates* |  |  | *chryptophytes* |  |  |  | *HDNA* | *LDNA* |
| (Evans et al., 2011) | *Cynaboacteria* |  |  | *Eukaryotic algae* | *Eukaryotic algae* |  |  |  |  |  |  | HDNA | LDNA |
| (Girault et al., 2013) |  |  |  |  |  |  |  |  |  |  |  | *HNA Bacteria* | *LNA Bacteria* |
| (Rekik et al., 2013) | *Synechoccus* | *Prochloroccus* |  | *picoeukaryotes* | *nanoeukaryotes* |  |  |  |  |  |  | HNA1/HNA2 | LNA |
| (Liu et al., 2014) | *PE-rich Synechococcus* |  | *PC-rich Synechococcus* |  |  |  |  |  |  |  |  |  |  |
| (Read et al., 2014) |  |  |  |  |  | Microcytis like cyanobacteria |  |  |  |  |  | *Heterotrophic bacteria* |  |
| (Romdhane et al., 2014) | *Picocyano*  *bacteria* |  |  | *small eukaryotes* |  |  |  |  |  |  |  | *HNA* | *LNA* |
| (McFarland et al., 2015) | Synechococcus |  |  |  | nanophytoplankton |  |  | Eukaryotic cells with phycoerythrin |  | microphytoplankton |  |  |  |
| (Thyssen et al., 2015) | *PicoOrg* |  |  | *PicoRED* | *NanoRED1/*  *NanoRED2* |  |  | NanoORG | NanoSWS | Micro1/  Micro2 | MicroLowORG/  MicroORG |  |  |
| (Gérikas Ribeiro et al., 2016) | *Synechococcus* | *Prochlorococcus* |  | *pico-phytoeukaryotes* | *nano-*  *phytoeukaryotes* |  |  |  |  |  |  |  |  |
| (Albrecht et al., 2017) | Picocyano  bacteria = APP |  |  |  |  |  |  |  |  |  |  |  |  |
| (van den Engh et al., 2017) | *Synechococcus* | *Prochlorococcus* |  |  |  |  |  |  |  |  |  |  |  |
| (VanOostendeetal., 2017) | *Synechococcus* | *Prochlorococcus* |  | *picoEuk* | *noPE-nanoEuk* |  |  | *PE-nanoEuk* | *Cocco* |  |  |  |  |
| (Patten et al., 2018) | *Synechococcus* | *Prochlorococcus* |  | picoeukaryotes |  |  |  |  |  |  |  | HDNA | LDNA |
| (Tamm et al., 2018) | *PE-type Synechococcus PC-type Synechococcus* |  |  | *Peuk* |  |  |  |  |  |  |  |  |  |
| (Zhao et al., 2019) | *Syn* | Pro |  | picoeuk | nanoeuk |  |  |  |  |  |  |  |  |
| (Bolanos et al., 2020) | *Synechococcus* | *Prochlorococcus* |  | *pico-eukaryotes* | *nano-eukaryotes* |  |  |  |  |  |  |  |  |
| (Pearl et al., 2020) | phycoerythrin (PE)-rich Synechococcus-like | PicoP | Phycocyanin-rich Synechococcus-like | PEUK |  |  |  |  |  |  |  |  |  |
| (Rocke et al., 2020) | *Synechoccus* | *Prochlorococcus* |  | *Picoeukaryotes* | *Nanoplankton* |  |  |  |  |  |  |  |  |
| (Yan et al., 2020) | *Synechococcus (Syn)* |  |  | *pico-eukaryotes (PEUKs)* |  |  |  |  |  |  |  | BII/BIII | BI |
| (Schatz et al., 2021) | Synechococcus |  |  | Pico  phytoplankton | Nano  phytoplankton |  |  |  | calcified *E. huxleyi* |  |  |  |  |
| (Mao et al., 2022) | SYN-PE1/SYN-PE2 |  | SYN-PC | Pico-EU / PicoNano-EU | Nano-EU | MIC |  | CRPTO |  |  |  |  |  |

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