Table 1: Brackish/marine dinoflagellates\* recorded in the Caspian Sea in the phytoplankton and in recent sediments. Linkages between the two are recorded where known.

|  |  |
| --- | --- |
| Phytoplankton\*\* | Sediments |
| *Amphidinium* cf*. rhynchocephalum* Annisomova1 |  |
| *Diplopsalis acuta* Paulsen2,3,7,9 |  |
| *D. lenticula* Bergh7,8,9 |  |
| *Exuviaella cordata* Ostenfeld2 |  |
| *Glenodinium behningii* (Lindemann) Kisselev2,3,5,6,7,9 |  |
| *G. caspicum* (Ostenfeld) Schiller3,7,8,9 |  |
| *G. obliquum* (Pouchet) 1 |  |
| *G. paululum* Lindemann1 |  |
| *G. penardii* Lemmermann2,9 |  |
| *G. pilula* (Ostenfeld) Schiller9 |  |
| *Gonyaulax baltica* Ellegaard, Lewis *et* Harding15 | *Impagidinium* *caspienense* Marret10,11,12,15 |
| *G. digitale* Kofoid2,7,8,9 |  |
| *G. minima* Matzenauer2 |  |
| *G. polygramma* Stein1,4 |  |
| *G. spinifera* Diesing2,7,8,9 |  |
| *Gonyostomum depressum* Herdman2 |  |
| *G. semen* Diesing7,8 |  |
| *Gymnodinium fuscum* (Ehrenberg) Stein1 |  |
| *G. lacustre* Schiller7,8,9 |  |
| *G. sanguineum* Hirasaka1 |  |
| *G. variabile* Herdman2,5,6,7,8,9 |  |
| *G. wulfii* Schiller1 |  |
| *Gyrodinium fusiforme* Kofoid *et* Swezy1 |  |
| *G. pingue* (Schütt) Kofoid *et* Swezy1 |  |
| *Heteraulacus polyedricus* (Pouchet) Drugg *et* Loeblich6 |  |
| *Heterocapsa rotundata* (Lohmann) Hansen9 |  |
| *H. triquetra* (Ehrenberg) Stein6 |  |
| *Kolkwitziella acuta* (Apstein) Elbrächter14 | Cysts of *Kolkwitziella acuta*14 |
| *Lingulodinium polyedra* (Stein) Dodge 2,6,7,8,9 | *Lingulodinium machaerophorum* (Deflandre *et* Cookson) Wall10,11,12 |
| *Oblea rotunda* (Lebour) Balech ex Sournia1,9 |  |
| *Peridiniella danica* (Paulsen) Okolodkov *et* Dodge2,7,8,9 |  |
| *Peridiniopsis berolinense*9 |  |
| *Peridinium minusculum* Pavillard1 |  |
| *P. subsalum* Ostenfeld2 |  |
| *Preperidinium meunieri* (Pavillard) Elbrächter2,5,9 |  |
| *Prorocentrum compressum* (Bailey) Abé ex Dodge1 |  |
| *P. cordatum* (Ostenfeld) Dodge2,3,4,5,6,7,8,9 |  |
| *P. lima* (Ehrenberg) Stein9 |  |
| *P. micans* Ehrenberg1,2,7,9 |  |
| *P. obtusum* Ostenfeld2,7,8,9 |  |
| *P. proximum* Makarova2,5,6,9 |  |
| *P. scutellum* Schröder1,2, 3,5,6,7,8,9 |  |
| *Protoperidinium achromaticum* Levander3,6,7,9 |  |
| *P. granii* Balech7 |  |
| *P. leonis* Pavillard7,8 |  |
| *P. pallidum* Balech7 |  |
| *Pyrophacus horologicum* Stein9 |  |
| *Scrippsiella trochoidea* (Stein) Loeblich1,2,6,9 |  |
|  | *Caspidinium rugosum* Marret10,11,12 |
|  | *Pyxidiniopsis psilata* (Wall *et* Dale) Head10,15 |
|  | *Spiniferites belerius* Reid11 |
|  | *Spiniferites cruciformis* Wall *et* Dale10,11,12 |
|  | Cysts of *Pentapharsodinium dalei* Indelicato *et* Loeblich III10,11,12 |
|  | Cysts of *Scrippsiella plana* Luo, Mertens, Bagheri *et* Gu13 |
|  | *Brigantedinium* Reid10,11,12 |

\*Gogorev (2006) includes a further 14 freshwater species found in the North of the Caspian Sea.

\*\*Species names updated according to AlgaeBase (Guiry and Guiry 2017)

1Kideys et al*.* 2005; 2Ganjian et al*.* 2010; 3Bagheri et al*.* 2012b; 4Pautova et al*.* 2015; 5Nasrollahzadeh et al*.* 2008a; 6Nasrollahzadeh et al*.* 2014; 7Bagheri and Fallahi 2014; 8Bagheri et al*.* 2010; 9Gogorev 2006;10Marret et al. 2004; 11Leroy et al*.* 2013c; 12Kazancı et al. 2004; 13Luo et al*.* 2016; 14Mertens et al*.* 2015; 15Mertens et al. 2017.