

The Algae of New Jersey (U.S.A.) III.
Pyrrhophyta (Dinoflagellates)

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This is the third paper in a series detailing the occurrence and distribution of algae in the state of New Jersey.

Dinoflagellates are important primary producers of both fresh and salt waters. Most are oceanic plankton forms but freshwater species are often abundant in drainage ditches, pools or small lakes. Blooms of some marine species cause "red tides" and result in fish and animal kills.

Again the genera are listed alphabetically and collection dates chronologically within them. If no citation is given, the species was noted by the author.

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PYRRHOPHYTA

DINOFLAGELLATES

- Amphidinium carterae Hulbert
Barnegat Bay (4,5,6); northern shore (7)
Amphidinium crassum Lohmann
northern shore (7)
Amphidinium fusiforme Martin
Barnegat Bay (4,5,6); northern shore (7); common in
Barnegat Bay (1,2); Little Egg Harbor, Barnegat
and Tuckerton Bay (9)
Amphidinium klebsii Kofoed & Swezy
northern shore (7)
Amphidinium operculatum Clap & Saehm
not common in shallow clear water, over a sandy bottom (1)
Amphidinium sphenoides Wulff
Barnegat Bay (4,5,6); northern shore (7)
Ceratium bucephalum Clive
rare (1,2); Barnegat Bay (4,5,6); northern shore (7)
Ceratium buceros Zacharias
northern shore (7)

- Ceratium furca (Ehrenberg) Dujardin
northern shore (7)
- Ceratium fusus (Ehrenberg) Clap & Saehm
well-known pelagic species brought into Barnegat Bay
by currents (1); Barnegat Bay (4,5,6); northern shore (7)
- Ceratium hirundinella (O.F.M.) Dujardin
Delaware-Raritan canal, May-Mar (8)
- Ceratium lineatum (Ehrenberg) Cleve
northern shore (7)
- Ceratium longipes (Bailey) Gran
northern shore (7)
- Ceratium macroceros (Ehrenberg) Letour
Barnegat Bay (4,5,6)
- Ceratium minutum Jorgensen
occasionally in Barnegat Bay (1); Barnegat Bay
(4,5,6); northern shore (7)
- Ceratium teres Kofoid
northern shore (7)
- Ceratium trichoceros (Ehrenberg) Kofoid
northern shore (7)
- Ceratium tripos Ehrenberg
fairly common at or near Barnegat Inlet (1);
Barnegat Bay (4); northern shore (7)
- Cochlodinium helix (Pouch) Temm & Lebour
Barnegat Bay, rare (1)
- Cystodinium bataviense Klebs
Helmetta (3)
- Dinophysis acuminata Claparide & Sachmann
Barnegat Bay and ocean, fairly common (1);
Barnegat Bay (4,5,6); northern shore (7)
- Dinophysis acuta Ehrenberg
Barnegat Bay (4,5,6); northern shore (7)
- Dinophysis acuminata Claparide & Sachmann
Little Egg Harbor, Barnegat and Tuckerton Bay (9)
- Dinophysis caudata Kent
Barnegat Inlet (1); northern shore (7)
- Dinophysis lackmanni Paulsen
northern shore (7)
- Dinophysis norvegica Claparide & Sachmann
northern shore (7)
- Dinophysis ovum Schutt
occasional, Barnegat Bay and ocean (1);
Barnegat Bay (4,6); northern shore (7)
- Dipolopsalis lenticula Bergh
Barnegat Bay, apparently not common (1); Barnegat Bay
(4,5,6)
- Exuviella apora Schiller
common in Barnegat and Delaware Bays and often found
in oyster stomachs (1); northern shore (7); Little
Egg Harbor, Barnegat and Tuckerton Bay (9)
- Exuviella baltica Lohmann
northern shore (7)

- Exuviella compressa (Stein) Ostenfeld locally common in Barnegat Bay and often in oyster stomachs (1); Barnegat Bay, Sept-Dec (4); northern shore (7)
- Exuviella lima (Ehrenberg) Butschli common in Barnegat Bay (1); Barnegat Bay, Sept-Dec (4); Barnegat Bay, Little Egg Harbor, Tuckerton Bay (9)
- Exuviella mariae-lebouriae Park & Ballantine northern shore (7)
- Exuviella marina Cienkowski northern shore (7)
- Glenodinium brave Martin northern shore (7)
- Glenodinium danicum Paulsen Barnegat Bay, very common frequently coloring tidal pools brown and often in oyster stomachs (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
- Glenodinium gymnodinium Penard Delaware-Raritan Canal, Jan-Apr (8)
- Glenodinium kulczynski (Wolosz) Schiller Delaware-Raritan Canal, Oct (8)
- Glenodinium lenticula (Bergh) Schiller northern shore (7)
- Glenodinium marinum Massart northern shore (7)
- Gonyaulax apiculata (Penard) Entz northern shore (7)
- Gonyaulax diacantha (Meunier) Schiller northern shore (7)
- Gonyaulax diegensis Kofoid northern shore (7)
- Gonyaulax digitale (Pouchet) LeBour Barnegat Bay (5)
- Gonyaulax longicornu Campbell northern shore (7)
- Gonyaulax polyedra Stein northern shore (7)
- Gonyaulax polygramma Stein Barnegat Bay (5)
- Gonyaulax scrippsae Kofoid Barnegat Bay, common (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat, Tuckerton Bay (9)
- Gonyaulax spinifera (Clap & Saehm) Diesing Barnegat Bay, common (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat, Tuckerton Bay (9)
- Gonyaulax tricantha Jorgensen Barnegat Bay (5)
- Gymnodinium amplinucleum Campbell northern shore (7)
- Gymnodinium aureum Kofoid and Swezy northern shore (7)

- Gymnodinium danicans Campbell
northern shore (7)
- Gymnodinium galesianum Campbell
northern shore (7)
- Gymnodinium gracilentum Campbell
northern shore (7)
- Gymnodinium incolratum Conrad & Kufferath
Barnegat Bay (4,5,6); northern shore (7)
- Gymnodinium lazulum Hulbert
northern shore (7)
- Gymnodinium marinum Kent
northern shore (7)
- Gymnodinium nelsoni Martin
Barnegat Bay, not uncommon (1,2); Barnegat Bay (4,5,6);
northern shore (7)
- Gymnodinium punctatum Pouchet
Barnegat Bay, extremely abundant (1);
Barnegat Bay (4,5,6); northern shore (7)
- Gymnodinium roseostigma Campbell
northern shore (7)
- Gymnodinium simplex (Lohman) Kofoid & Swezy
northern shore (7)
- Gymnodinium splendens Lebour
most abundant large species in Barnegat Bay, occurring in
dense swarms Aug-Sept (1); Barnegat Bay (4,5,6); northern
shore (7); Little Egg Harbor, Barnegat and Tuckerton (9)
- Gymnodinium stellatum Hulbert
northern shore (7)
- Gymnodinium subroseum Campbell
northern shore (7)
- Gymnodinium subrufescens Martin
Barnegat Bay, abundant in certain brackish pools; Delaware
Bay, abundant causing patches of red water (1,2); northern
shore (7); Little Egg Harbor, Barnegat, Tuckerton Bay (9)
- Gymnodinium valdecompressum Campbell
northern shore (7)
- Gymnodinium verruculosum Campbell
northern shore (7)
- Gyrodinium aureolum Hulbert
northern shore (7)
- Gyrodinium dominans Hulbert
Barnegat Bay (4,5,6); northern shore (7)
- Gyrodinium estuariale Hulbert
northern shore (7)
- Gyrodinium falcatum Kofoid & Swezy
northern shore (7)
- Gyrodinium formosum Campbell
northern shore (7)
- Gyrodinium gloeculum Hulbert
northern shore (7)
- Gyrodinium metum Hulbert
northern shore (7)

- Gyrodinium pellucidum Wulff
extremely abundant, Barnegat Bay (1);
Barnegat Bay (4,5,6);northern shore (7)
- Gyrodinium pingue (Schutt) Kofoid & Swezy
Barnegat Bay, not uncommon (1);
Barnegat Bay (4,5,6);northern shore (7)
- Gyrodinium resplendens Hulbert
Barnegat Bay (4,5,6);northern shore (7)
- Gyrodinium spirale (Bergh) Kofoid & Swezy
northern shore (7)
- Gyrodinium uncatenum Hulbert
northern shore (7)
- Gyrodinium undulans Hulbert
northern shore (7)
- Heterocapsa triquetra (Ehrenberg) Stein
Barnegat Bay (4);northern shore (7)
- Katodinium asymmetricum (Massart) Loeblich III
northern shore (7)
- Katodinium rotundatum (Lohmann) Loeblich III
northern shore (7)
- Kryptoperidinium foliaceum (Stein) Lindemann
Barnegat Bay, not uncommon (1)
- Nematodinium armatum (Dogiel) Kofoid & Swezy
Barnegat Bay, abundant, Aug (1);Barnegat Bay (4,5,6)
- Noctiluca scintillans Macartney
Barnegat Bay (4,5,6)
- Oblea rotunda (Lebour) Balech
northern shore (7)
- Peridiniopsis rotunda Lebour
Barnegat Bay;extremely abundant in plankton and often
in oyster stomachs (1);Little Egg Harbor, Barnegat and
Tuckerton Bay (9)
- Peridinium achromaticum Levander
Tuckerton and Barnegat Bay, not rare (1)
- Peridinium breve Paulsen
northern shore (7)
- Peridinium brevipes Paulsen
Barnegat Bay, abundant in various parts (1);Barnegat Bay
(4,5,6);northern shore (7);Little Egg Harbor, Barnegat
and Tuckerton Bay (9)
- Peridinium claudicans Paulsen
Tuckerton Bay, common (1);Barnegat Bay (4,5,6);northern
shore (7);Little Egg Harbor, Barnegat, Tuckerton Bay (9)
- Peridinium concoides Paulsen
northern shore (7)
- Peridinium depressum Bailey
Barnegat Bay (4,5,6);northern shore (7)
- Peridinium divaricatum (Meunier) Parke
northern shore (7)
- Peridinium divergens Ehrenberg
northern shore (7)
- Peridinium excavatum Martin
Barnegat Bay, common (1,2);Barnegat Bay (4,5,6);northern

- shore (7); Little Egg Harbor, Barnegat, Tuckerton Bay (9)
Peridinium granii Ostenfeld
Barnegat Bay (4,5,6)
Peridinium leonis Pavillard
Barnegat Bay, common; Delaware Bay, abundant (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
Peridinium pallidum Ostenfeld
Tuckerton Bay (1,); Barnegat Bay (4,5,6); northern shore (7)
Peridinium pellucidum (Bergh) Schutt
Barnegat Bay, rare (1)
Peridinium roseum Paulsen
Barnegat Bay (4,5,6)
Peridinium triquetra (Stein)
Barnegat Bay (4,5,6)
Peridinium trochoideum (Stein) Lemm
Barnegat Bay, extremely abundant (2); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
Peridinopsis rotunda Lebour
Barnegat Bay (4,5,6)
Polykrikos barnegatensis Martin
Barnegat Bay, Sept (1); Barnegat Bay (4,5,6); northern shore (7)
Polykrikos kofoidii Chatton
Barnegat and Delaware Bay, abundant (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
Prorocentrum micans Ehrenberg
extremely common in Barnegat Bay and in ocean waters; almost always found in oyster stomachs (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
Prorocentrum minimum (Pavillard) Schiller
northern shore (7)
Prorocentrum redfieldi Bursa
Barnegat Bay (4,5,6); northern shore (7)
Prorocentrum scutellum Schroder
common in ocean waters and at times in Barnegat Bay (1); Barnegat Bay (4,5,6); northern shore (7)
Prorocentrum triangulatum Martin
extremely common in Barnegat Bay; occasionally the most abundant organism in oyster stomachs (1); Barnegat Bay (4,5,6); northern shore (7); Little Egg Harbor, Barnegat and Tuckerton Bay (9)
Protoceratium reticulatum (Clasp & Saehm) Bergh
Barnegat Bay (1)

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