KEY TO CALIFORNIA GORGONIIDS

by David G. Harden

March 2, 1978

1a. Reticulate; slender branches; color tan, pink or red: *Pacifigorgia tenuis*.

1b. Not reticulated: (2)

2a. Ring-warted spindles (*Lophogorgia*): (3)

2b. Other: (9)

3a. Spicules long acute spindles; branchlets slender, 0.6-1.0 mm; branching sparsely subpinnate; calyces small bumps: (4)

3b. Spicules commonly subacute or blunt: (5)

4a. Color white: *Lophogorgia casta*.

4b. Color tan and orange: *Lophogorgia* sp. D.

5a. Spicules include both somewhat acute and blunt forms: (6)

5b. Only blunt forms: (8)

6a. Calyces flush; branches long; branching loose: *Lophogorgia panamensis*.

6b. Calyces not flush: (7)

7a. Slender branchlets, unbranched, 1 mm thick; color white, pink or red: *Lophogorgia* sp. E.

7b. Calyces subcylindrical; subpinnate branching; color red: *Lophogorgia rubra*.

8a. Calyces flush; loosely branched; color white: *Lophogorgia alba*.

8b. Calyces form low mounds, laterally on flattened branchlets; color red: *Lophogorgia acuta*.

9a. Spicules with double wheels (*Eugorgia*): (10)

9b. Other: (12)
10a. Stem and branchlets about the same diameter; color red: *Eugorgia rubens*.

10b. Branchlets half as thick as branches: (11)

11a. Pinnate, partly reticulate; color red: *Eugorgia* sp. A.

11b. Loosely branched, long free branchlets: *Eugorgia* sp. B.

12a. Spicules commonly nudibranch shaped (*Muriceidae*): (13)

12b. Other: (16)

13a. Spiney nudibranchs; color brown (*Muricea*): (14)

13b. Heavy plates and spinose spincula present (*Thesea*): (15)

14a. Calyx lower lip appressed to stem; living polyps yellow: *Muricea appressa*.

14b. Calyx pour-like, open, or elongate mouth situated on distal side of wart-shaped calyx: *Muricea fruticosa*.

15a. Color tan; heavily branched, 3 mm thick: *Thesea effusa*.

15b. Weakly branched; color white: *Thesea variabilis*.

16a. Calyces flush or very slightly raised: (17)

16b. Calyces prominent: (19)

17a. Anthocoidea exserta; pink: *Muricella comolanata*

17b. Anthocoidea retractile: (18)

18a. Spicules slender ring-warted spindles and heavily warded double heads: *Swiftia spauldingi*.

18b. Spicula include irregularly warted forms, double heads and stellate spicula: *Psammogorgia teres*.

19a. Spicules include torches: *Adalogorgia phyllosclera*.

19b. Torches absent: (20)
20a. Spicules include irregularly spiny scales, no spindles: *Plumarella longispina*.

20b. Spicules include spindles: (21)

21a. Calyces prominent with proximal lip extended and appressed; spicules mostly double-heads; color yellow-brown and red-brown: *Nicella guadalupensis*.

21b. Other: (22)

22a. Slender branches often appearing tangled; long acute anthocoidal spindles: (23)

22b. Anthocoidea well developed and often exert: (24)

23a. Branches moderate, 1.5 mm; calyces evenly distributed; color tan; mostly planar pinnate branching: *Heterogorgia angulata*.

23b. Calyces irregularly distributed on all sides of branches; color white: *Heterogorgia tortuosa*.

24a. Calyces large; branching pinnate: *Swiftia kofoidi*.

24b. Calyces low mounds; branching mostly dichotomous: (25)

25a. Color is flesh with white polyps: *Swiftia sp. A*.

25b. Color orange with heavy branches: (26)

26a. Anthocoidea red; deep water: *Swiftia simplex*.

26b. Anthocoidea white; shallow water: *Swiftia marki*. 