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SUPPLEMENTARY ONLINE MATERIAL FOR

A new species of the ginglymodian *Isanichthys* from the Late Jurassic Phu Kradung Formation, northeastern Thailand

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Characters and data matrix used in the analysis

The character and their definition are from Cavin et al. in press, with the addition of character 90 and with the modification of character 29 and 31.

1. Large posteriorly directed process on the epiotic:
   0. absent
   1. present
2. Postemporal fossa:
   0. present
   1. absent
3. Supraoccipital bone:
   0. absent
   1. present
4. Lateral process of basioccipital:
   0. absent
   1. present

5. Opisthotic:
    0. present
    1. absent
6. Intercalar:
    0. present, no contact with the prootic
    1. present, contact with the prootic
    2. absent
7. Basisphenoid:
    0. present
    1. absent
8. Ethmoid region:
    0. 'normal' (i.e. not one of the derived states)
    1. shortened (orbit in the anterior third of the head length)
    2. lengthened (orbit in the posterior half of the head length)
9. Ethmoidal region:
    0. ossified
    1. reduced
10. Elongation of rostral region anterior to lower jaw symphysis:
    0. extends anterior to dentary symphysis by less than 20% of mandibular length
    1. extends well anterior to dentary symphysis by more than 50% of mandibular length
11. Vomer differentiated and molded to underside of ethmoid region:
    0. no
    1. yes
12. Posterior extent of median rostral bone:
    0. with lamellar bone component separating the nasals, at least anteriorly
    1. a simple tube at the anterior end of snout with no internasal lamella
    2. no autogenous median rostral
13. Premaxilla immovably attached to the braincase by means of a long nasal process tightly sutured to the frontals:
    0. no
    1. yes
14. Anterior portion of premaxilla lining the nasal pit and pierced by a large foramen for the olfactory nerve:
    0. no
    1. yes
15. Ascending process of the premaxilla:
    0. not participating in the dermal skull roof cover
    1. participating in the dermal skull roof cover
16. Premaxilla width to length ratio based on dorsally exposed region:
    0. 2 – 0.28
    1. 0.18 – 0.02
17. Premaxillary tooth row curves anteriorly at symphysis and laterally onto projecting horns as it nears frontal:

0. no
1. yes

18. Supraorbital sensory canal on premaxillary process:
    0. absent
    1. present
19. Frontal proportions:
    0. narrower anteriorly than posteriorly
    1. as broad anteriorly than posteriorly
20. Ratio of frontal length by parietal length:
    0. >= 2.5
    1. < 2.5
21. Parietals:
    0. symmetrical
    1. asymmetrical
22. Parietal portion of the supraorbital sensory canal:
    0. present
    1. absent
23. Shape and number of extrascapulars:
    0. two extrascapulars, medially narrow
    1. more than 2, subrectangular
    2. some extrascapulars fused with parietals
24. Junction of supraorbital canal with infraorbital canal:
    0. exclusively within frontal bone
    1. includes both frontal and dermopterotic bones
    2. exclusively within dermopterotic bone
25. Commissure between right and left supraorbital canal within frontal:
    0. absent
    1. present
26 Tube-like canal bearing anterior arm on antorbital:
    0. absent
    1. present
27. A series of infraorbitals anterior to the circumorbital ring:
    0. absent
    1. present
28. Infraorbitals:
    0. edentulous
    1. toothed
29. Pattern and disposition of suborbitals:
    0. a few suborbitals (2-8) arranged in a single row
    1. a single suborbital
    2. a mosaic of suborbitals
    3. no suborbital
    4 two suborbitals, the ventral one much larger than the dorsal one
30. Cheek:

0. not complete (quadrate visible)
1. complete

31. Supraorbital bone/bones:
    0. absent
    1. one
    2. two
    3. more than two
32. Dermosphenotic:
    0. loosely attached to the skull roof, reaches the orbital margin
    1. tightly sutured into the skull roof, reaches the orbital margin
    2. does not reach the orbital
33. Dermosphenotic/sphenotic association:
    0. closely associated with each other (i.e. contacting or fused to each other)
    1. not in contact with each other
34. Sphenotic with a small dermal component:
    0. no
    1. yes
35. Orbital ring:
    0. open
    1. closed
36. Skull length/orbit diameter:
    0. <6
    1. >6
37. Quadrate position:
    0. below or behind the orbit
    1. in front of the orbit
38. Laterally sliding articulation between metapterygoid and the basipterygoid process (= parasphenoid-prootic process) in adults:
    0. absent
    1. present
39. Quadrate/metapterygoid contact or close association:
    0. present
    1. absent
40. Part of the dorsal surface of the ectopterygoid ornamented and forming part of the skull roof:
    0. no
    1. yes
41. Length of ectopterygoid relative to entopterygoid:
    0. less than twice the length of the entopterygoid
    1. more than twice the length of the entopterygoid
42. Dermopalatine teeth:
    0. Adults with very large fangs or large crushing teeth on dermopalatine (i.e. teeth as large as any in the premaxilla and dentary)

1. adults with only very small teeth on dermopalatine (i.e. smaller than the large teeth of the premaxilla and dentary)
2. dermopalatine without teeth
3. both jaw teeth and dermopalatine teeth are very tiny

43. Elongate posteroventral process in the quadrate:
0. absent
1. present

44. Quadratojugal:
0. plate-like
1. splint-like bone articulating with the anterior limb of the preopercle
2. absent

45. Symplectic bone shape:
0. slightly curved tube or splint
1. hatchet shaped
2. L-shaped
3. irregularly shaped subrectangular bone with two ventrally pointed arms

46 Symplectic/quadrate articulation:
0. present
1. symplectic separated from quadrate by a quadratojugal

47. Tritorial dentition between palate and coronoids:
0. non tritorial
1. moderately tritorial
2. strongly tritorial

48 Teeth with plicidentine:
0. absent
1. present

49. Maxilla:
0. free, with a posterior rounded plate
1. free, with posteriorly a constant depth
2. atrophied maxilla fused with the infraorbitals

50. Maxilla with well developed anterior articular process:
0. yes
1. no

51. Mobility of maxilla:
0. present
1. absent

52. Marginal teeth of upper jaw:
0. conical teeth of moderate to large size
1. microteeth
2. no teeth on margin of upper jaw

53. Supramaxillary elements:
0. absent
1. present

54. Lower jaw articulation:

0. single
1. double

55. Mandibular length as a percentage of head length:
0. less than 43%
1. more than 44%

56. Long posterior process on the dentary:
0. absent
1. present, ventral to the angular
2. present, dorsal to the angular

57. Tooth organization of dentary:
0. dentary teeth in a single row and all of similar size, arranged along the anterior third of the mandible at least
1. in addition to a lateral single row of similar sized teeth, there is a medial row of much larger fangs
2. a pavement of small similar sized teeth not in rows
3. no teeth on dentary
4. dentary teeth in a single row and all of similar size, concentrated at the anterior extremity of the mandible

58. Supernumerary sensory canal or canalicles in the anterior part of the lower jaw:
0. absent
1. present

59. Type of mandibular coronoid process:
0. a single bone
1. a compound structure involving more than one bone
2. absent

60. Prearticular:
0. present
1. absent

61. Supraangular:
0. absent
1. present

62. Coronoid bone:
0. present as separate ossifications
1. absent

63. Mentomeckelian bone:
0. present
1. absent

64. A series of paired primary basihyal toothplates supported by a spatulated tongue:
0. absent
1. present

65. Number of branchiostegal rays:
0. more than 4
1. usually 4
2. usually 3

3. usually 1
4. none

66. Gulars:
0. present
1. absent

67. Exposed, anterodorsal projection of subopercle:
0. little or narrow projection extending dorsally
1. forming an elongated process extending one third or two thirds the way up along the anterior edge of the opercle

68. Exposure of dorsal limb of preopercle:
0. mostly exposed forming a significant part of the ornamented lateral surface of the skull anterior to the opercle
1. entirely covered or nearly covered by other dermal bonesn in adults

69. Vertical and horizontal limbs of the preopercle, measured along the sensory canal:
0. > 110°
1. <= 110°

70. Interopercle:
0. present
1. absent

71. Ventral process of posttemporal bone:
0. absent
1. weakly developed
2. well-developed as a ventral rod-like process suturing to intercalary process
3. developed as a flat-flange

72. Posttemporal penetration by lateral line canal:
0. present
1. absent

73. Supracleithrum with a concave articular facet for articulation with the posttemporal:
0. no
1. yes

74. Medial processes of supracleithrum:
0. absent
1. present

75. Medial wing on cleithrum:
0. absent
1. present

76. Clavicle or ‘clavicle elements’:
0. present
1. absent

77. Vertebral centra:
0. not ossified
1. some centra only partly or fully ossified
2. all centra strongly ossified, amphicoelous
3. all centra strongly ossified, opisthocoelous

78. A series of diplospondylous spool-shaped vertebrae in preural region:
    0. absent
    1. present
79. Long epineural intermuscular bones:
    0. absent
    1. present
80. Ratio body length / body depth:
    0. > 3,5, dorsal fin in the middle of the back
    1. > 3,5, dorsal fin posterior
    2. =< 3,5, dorsal fin posterior
81. Caudal fin ray branching:
    0. two or more unbranched principal rays
    1. normally all principal rays are branched
82. Number of principal caudal fin rays in adults:
    0. 11-13 (but usually 12)
    1. usually more than 12
    2. usually less than 12
83. Fin ray to pterygiophore ratios of dorsal and anal fins:
    0. 2:1 or greater
    1. about 1:1
84. Caudal fin:
    0. two lobes
    1. one rounded lobe
85. Dorsal ridge scale:
    0. absent
    1. present
86. Flank scale morphology:
    0. absence of *Obaichthys*-type scale
    1. presence of *Obaichthys*-type scale
87. Flank scale with large prominent posteriorly pointing spines:
    0. no
    1. yes
88. Basal and fringing fulcra of the fins:
    0. present, small (< 1/3 ray length)
    1. present, enlarged (> 1/3 ray length)
    2. absent
89. Large, firmly anchored, pointed conical teeth covering the dermal bones of the skull and fringing fulcra of the fins:
    0. absent
    1. present
90. Anterior supraorbital bone contacts:
    0. one infraorbital
    1. more than one infraorbitals

Cavin, L., Deesri, U., and Suteethorn, V. Osteology and relationships of *Thaiichthys* nov. gen., a Ginglymodi from the late Jurassic – Early Cretaceous of Thailand. *Palaeontology*. In press.

Data matrix

	1 2 3 4 5 6 7 8 9 0 1 2 3 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0
Polypterus ornatipinnis	1 ? 0 0 0 0 ? 1 0 0 0 0 0 0 0 0 0 0 1 - - - 1 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 ? 0 - - 0 0 - - 1 0 0 0 1 0 0 0 0 0 0 0 0 0 4 0 0 0 - 1 3 0 0 - 0 0 2 0 0 0 - 2 0 1 0 0 0 2 ? -
Amia calva	0 0 0 0 1 1 0 1 0 0 1 0 1 1 0 0 0 0 0 1 1 0 0 0 0 1 0 0 3 0 0 1 0 1 0 1 0 0 0 0 0 0 0 2 1 0 0 0 0 0 0 0 1 1 1 0 0 0 1 0 1 0 0 0 0 0 ? 0 0 0 2 0 0 0 0 1 2 1 0 0 1 1 1 1 0 0 0 2 0 -
Araripelepidotes temnurus	1 0 0 0 1 2 0 1 0 0 ? ? ? ? ? ? ? ? 1 1 ? ? 1 ? ? 1 1 0 0 1 2 0 1 1 0 0 0 ? ? ? ? ? 0 ? ? 1 0 0 1 0 0 2 0 0 0 0 3 0 2 ? ? 1 1 0 ? 1 1 0 1 0 ? ? ? ? 1 ? 0 ? ? 1 1 0 ? 1 1 0 1 1 0 -
Atractosteus spatula	0 1 0 0 1 1 1 2 1 0 1 1 1 1 1 1 0 1 0 0 0 1 1 2 1 1 1 1 2 1 2 2 1 1 1 1 1 1 1 1 1 0 0 1 2 1 0 1 2 1 0 0 0 0 1 2 1 0 1 0 1 0 1 1 2 1 1 1 1 1 1 1 1 1 0 3 0 0 1 1 0 1 1 0 0 0 0 0 1
Dentilepisosteus laevis	1 ? 0 0 1 0 1 2 1 1 1 1 1 ? 1 1 1 1 0 0 0 ? 1 2 0 1 1 0 0 0 3 2 0 1 1 1 1 1 1 0 0 1 0 1 ? 1 0 0 0 0 0 0 1 0 0 2 4 0 1 0 1 0 1 1 1 1 1 0 1 0 2 0 0 0 1 ? 3 0 0 1 1 0 1 1 0 0 1 ? 1 1
Caturus furcatus	0 0 0 0 1 1 0 0 0 0 1 0 1 1 0 0 0 0 1 0 1 1 0 1 0 1 0 0 0 1 3 1 0 1 - 0 0 0 0 0 0 0 ? 2 1 0 0 0 0 0 0 0 1 1 1 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 -
Cuneatus wileyi	? 1 0 0 1 2 ? 0 1 0 1 1 1 1 1 0 0 1 0 1 0 ? 1 2 ? 1 1 0 2 1 2 0 1 ? 1 1 1 1 1 1 1 2 ? 1 ? 1 0 1 2 1 ? 1 1 0 0 2 4 0 1 0 1 0 1 1 2 1 1 1 1 1 1 1 1 ? 1 ? 3 0 0 1 1 0 1 1 0 0 0 0 0 1
Isanichthys lertboosi	0 0 0 0 1 2 0 1 1 0 ? ? 1 ? 0 0 0 ? 1 1 1 ? 1 ? 0 1 1 0 0 1 2 0 0 1 1 1 0 ? ? 0 ? 1 ? ? ? ? 1 0 0 0 0 2 1 ? 0 1 0 1 1 ? 1 0 ? 0 0 1 1 0 0 0 ? 0 ? ? ? ? 0 0 ? 0 ? 1 ? ? 1 0 0 1 0 1
Isanichthys palustris	0 ? 0 ? ? ? ? 0 ? 0 ? ? ? ? ? ? ? ? 1 1 ? ? 1 ? ? ? 1 0 2 1 2 0 0 1 1 1 0 ? ? 0 ? ? ? ? ? ? ? 0 0 0 0 0 1 ? 1 1 0 1 ? ? 1 ? ? 0 0 1 1 0 0 0 ? 0 0 ? ? ? ? ? ? 1 1 ? ? 0 0 0 0 ? 0 1
Isanichtys latifrons	? 0 0 0 ? ? ? 1 ? 0 1 ? 1 1 0 ? 0 0 1 1 1 0 1 ? 0 ? 1 0 2 1 2 0 ? ? 1 1 0 ? ? ? ? 0 0 ? ? ? 1 0 0 0 0 0 ? ? 0 1 0 1 1 ? 1 0 ? 0 ? 1 1 0 0 0 ? ? 1 1 ? ? ? ? ? ? ? ? ? ? 0 0 0 0 0 1
Isanichthys luchowensis	? ? ? ? ? ? ? 1 ? 0 ? ? ? ? ? ? ? 0 ? 1 ? ? ? ? ? 0 ? 1 0 0 1 ? ? 0 1 1 1 0 ? ? 0 ? 0 ? ? ? ? 0 0 ? ? 0 0 ? ? 1 1 0 1 ? ? ? ? ? ? ? 1 1 0 0 0 ? 0 1 ? ? ? ? ? ? ? ? ? ? ? 0 0 0 0 0 ?
Lepidotes buddhabutrensis	0 0 0 0 1 0 1 1 1 0 1 1 1 1 0 0 0 0 1 1 0 1 1 1 0 1 1 0 ? 1 2 0 0 1 1 0 0 0 ? 0 0 1 ? 1 0 1 0 0 1 0 0 0 0 0 0 0 1 4 1 1 0 1 1 1 0 0 1 1 0 1 0 ? 0 0 0 1 ? 1 0 0 2 1 1 1 0 ? 0 0 1 0 1
Lepidotes elvensis	? ? 0 ? ? ? ? 0 1 0 1 ? 1 1 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 1 2 0 0 1 1 0 0 ? ? 0 ? 0 ? ? ? ? 0 0 0 0 0 0 1 0 0 1 0 1 ? ? 1 0 ? 0 0 1 0 0 0 0 ? 0 1 ? ? ? 0 0 ? 2 ? 1 ? 0 0 0 0 0 0 1
Lepidotes gloriae	1 ? ? 0 1 ? ? 0 1 ? 1 ? 1 1 0 ? 0 0 0 0 1 0 2 ? ? 1 1 0 ? ? ? ? ? ? ? ? ? 0 0 ? 0 0 0 0 ? ? ? 0 0 0 0 0 0 0 1 ? 0 1 4 1 ? ? ? 0 ? 0 ? 1 ? ? ? 0 2 0 1 0 1 0 ? ? ? ? ? ? ? ? ? 0 0 0 1 0 ?
Lepidotes mantelli	0 0 0 0 1 0 0 0 1 0 1 ? 1 1 0 0 0 0 0 0 0 1 0 1 ? 0 ? 1 0 0 1 3 0 0 1 1 0 0 1 0 0 0 0 0 1 0 0 2 0 0 0 0 2 1 0 0 1 4 1 1 ? 1 0 ? 0 ? 1 ? 0 0 0 ? 0 1 ? 1 ? 1 1 1 1 ? ? ? 0 1 0 0 0 0 1
Lepidotes microrhis	? ? 0 ? ? ? ? 0 ? 0 1 1 1 1 0 0 0 0 1 1 ? 1 2 1 0 1 1 0 4 0 2 0 ? ? 1 0 0 ? ? 0 ? 0 0 ? ? ? 0 0 0 0 0 2 1 0 0 1 0 0 ? ? 1 0 ? 0 0 1 0 0 0 0 0 0 1 ? ? ? 0 ? ? ? 2 ? 1 ? 0 0 0 0 1 0 1
Lepidotes minor	1 ? 0 ? 1 0 0 0 1 0 1 1 1 1 0 0 0 0 1 0 0 0 0 ? ? 1 1 0 4 0 3 0 ? ? 1 0 0 ? ? 0 0 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 1 1 ? 1 0 ? 0 0 1 1 0 0 0 2 0 0 ? ? ? 0 0 0 2 1 1 1 0 1 0 0 1 0 1
Lepidotes piauhyensis	? ? 0 ? ? ? ? 0 ? 0 ? ? 1 1 0 0 0 0 0 1 1 1 0 ? 0 1 1 0 0 1 2 0 0 1 1 0 0 1 0 0 0 1 0 1 ? ? 1 0 0 ? 0 2 1 0 0 1 0 1 1 0 1 0 ? 0 0 1 0 0 0 0 ? 0 1 ? ? ? 0 ? ? 2 1 1 ? 0 0 0 0 0 0 1
Lepidotes semiserratus	0 ? 0 0 1 0 0 0 1 0 ? ? 1 1 0 0 0 0 0 1 1 0 0 - 0 ? 1 0 0 1 3 0 0 1 1 0 0 1 0 0 0 ? 0 ? 0 0 1 0 0 ? 0 0 1 0 0 1 0 1 1 ? 1 0 ? 0 ? 1 0 0 0 0 ? 0 ? ? ? ? ? ? ? ? ? ? ? 0 0 0 0 0 1
Lepisosteus osseus	0 1 0 0 1 1 1 2 1 0 1 1 1 1 1 1 1 0 1 0 0 0 1 1 2 1 1 1 1 2 1 2 0 1 1 1 1 1 1 1 1 1 1 0 1 2 1 0 1 2 1 0 0 ? 0 1 2 1 0 1 0 1 0 1 1 2 1 1 1 1 1 1 1 1 1 0 3 0 0 1 1 0 1 1 0 0 0 0 0 1
Leptolepis coryphaenoides	0 0 1 0 1 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0 0 0 0 ? 0 0 0 0 1 0 2 0 0 0 0 0 0 ? ? 0 ? ? 1 1 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 ? ? ? ? ? 0 ? 0 0 0 0 0 ? 0 ? ? ? ? 2 0 1 0 ? 1 ? 0 0 0 0 2 0 -
Macrosemimimus fegerti	? ? ? ? ? ? 0 2 1 0 1 ? 1 ? 0 0 0 0 0 0 ? 0 2 ? 0 0 1 0 4 0 ? 0 0 1 0 ? 0 ? ? 0 0 ? 0 1 ? ? 1 0 0 0 0 2 1 0 0 1 0 1 1 0 1 0 ? 0 0 1 1 0 0 0 1 0 1 ? ? ? ? ? ? 0 0 1 ? 0 0 0 0 0 0 -
Macrosemimimus lennieri	1 0 0 0 1 2 0 0 1 0 ? ? 1 1 0 0 0 0 0 0 1 ? 2 1 ? 0 1 0 4 0 2 0 ? 0 0 0 0 ? 0 0 0 ? 0 1 ? ? 2 ? 0 0 0 ? 1 0 0 1 0 ? 1 ? 1 ? ? 0 0 1 1 0 0 0 ? ? ? ? ? ? ? ? ? 2 ? ? ? 1 0 0 ? 0 ?
Macrosemius rostratus	0 ? 0 0 1 2 ? 2 0 0 1 1 0 0 0 0 0 0 0 0 0 1 2 1 0 1 1 0 3 0 0 0 0 0 0 ? 1 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0 1 0 0 1 1 0 0 0 ? 0 0 0 1 1 2 0 0 0 1 0 1 1 - 0 0 1 0 -
Masillosteus janeae	? ? 0 0 1 2 ? 0 1 0 1 1 1 1 1 1 0 0 1 0 1 0 ? 1 2 1 1 1 0 2 1 2 2 1 ? 1 1 1 ? 1 0 ? 0 ? 1 ? 1 1 1 2 1 ? 2 1 0 0 2 0 1 1 0 1 0 1 1 2 1 1 0 1 1 1 1 1 ? 1 ? 3 0 0 1 1 0 1 1 0 0 0 0 0 1
Neosemionotus puntanus	? ? 0 ? ? ? ? 0 1 0 1 1 1 1 1 1 0 0 0 1 1 1 0 1 ? 0 1 1 0 0 0 2 2 ? 0 1 0 0 ? ? 0 ? ? ? 1 ? ? 0 0 0 0 0 0 1 ? 1 1 0 1 ? ? ? 1 ? ? 0 0 1 1 0 0 0 ? 0 1 ? 1 0 ? ? ? 2 1 1 ? 0 1 0 0 1 0 ?
Notagogus	? ? 0 ? ? ? ? 2 0 0 ? ? 1 ? 0 0 0 ? 0 0 1 1 2 1 0 1 1 0 3 0 3 1 0 ? 0 ? 1 ? 0 0 ? ? 0 1 ? ? 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 ? 1 ? ? 0 0 1 1 0 0 0 ? 0 ? ? ? ? ? 2 ? 0 0 0 0 ? 0 0 0 0 1 0 -
Obaichthys decorates	0 1 0 1 1 ? 1 2 ? 1 1 ? 1 ? 1 1 1 1 0 1 0 ? 1 2 ? ? 1 0 0 1 ? 2 0 1 1 1 1 1 1 0 0 1 0 1 ? 1 0 0 0 0 0 0 0 0 0 2 4 0 1 0 ? 0 1 1 1 1 1 0 1 0 ? ? 0 0 1 0 3 0 0 1 1 0 1 1 0 1 1 ? 1 1
Paralepidotus ornatus	? ? 0 ? ? ? ? 0 1 0 ? 1 1 1 1 0 - 0 0 1 1 1 0 ? ? 1 1 0 1 0 3 0 ? 0 0 0 0 ? 0 0 ? ? 0 1 0 0 2 0 0 ? 0 2 ? 0 0 1 ? 1 ? ? ? ? ? 0 0 1 1 0 0 0 ? ? ? ? ? ? 1 0 0 2 ? 1 ? 0 1 0 0 0 0 -
Pholidophorus bechei	0 0 1 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 2 0 0 0 1 0 0 0 0 0 0 3 ? 2 0 0 0 0 1 0 0 1 1 0 1 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 ? 0 0 0 0 0 1 0 1 0 1 1 1 0 0 0 0 0 0 -
Pliodetes nigeriensis	? ? 0 ? ? ? ? 0 ? 0 1 1 1 1 ? 0 0 0 1 1 0 1 1 ? ? 1 1 0 2 1 2 0 0 1 1 1 0 ? ? 0 ? 0 0 1 ? ? 0 0 1 0 0 2 0 ? 0 0 4 0 2 ? ? 1 1 1 0 ? 1 1 0 1 0 ? ? 1 ? ? ? 1 ? ? ? ? ? ? ? 1 0 1 1 1 1
Sangiorgioichthys aldae	? ? 0 ? ? ? ? 0 1 0 ? 0 1 1 0 0 0 0 0 0 0 0 0 ? 0 1 1 0 2 1 2 0 ? 0 1 0 0 ? ? 0 ? ? ? ? 0 ? 0 0 0 0 0 2 1 ? 0 0 0 0 1 ? 1 ? ? 0 0 1 1 0 0 0 ? 0 1 ? ? ? 0 ? ? 2 0 1 ? 0 1 0 0 0 0 0
Sangiorgioichthys sui	? ? 0 ? ? ? ? 0 1 0 ? 0 1 1 0 0 0 0 0 1 0 0 ? ? 0 1 1 0 0 1 2 0 ? 0 ? ? 0 ? ? 0 ? ? 0 ? ? 0 ? 0 0 0 0 0 0 1 0 0 0 0 1 1 0 1 1 1 0 0 1 1 0 0 0 ? 0 1 ? 1 ? ? ? ? 2 0 1 ? 0 1 0 0 1 0 -
Semiolepis brembanus	? ? 0 ? ? ? ? 2 0 0 1 0 ? ? 0 ? 0 ? 0 0 1 ? 1 ? 0 1 1 0 1 0 3 0 ? 0 0 ? 1 ? ? 0 0 ? ? ? ? ? 1 0 0 0 0 0 1 0 0 ? 0 0 ? ? ? 0 ? 0 0 1 ? 0 0 0 ? 0 ? 0 ? ? ? ? ? ? ? ? 2 1 1 ? 0 1 0 0 0 0 -
Semionotus elegans	1 ? 0 0 1 ? ? 0 1 0 1 1 1 1 0 0 0 0 0 0 1 0 0 1 0 1 1 0 1 0 3 0 0 1 1 0 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 1 0 0 1 0 0 1 0 1 0 1 0 0 1 1 0 0 0 2 0 0 0 1 0 0 0 0 1 1 1 1 0 1 0 0 1 0 1
Semionotus kanabensis	? ? 0 ? ? ? ? 0 ? 0 ? ? 1 1 0 0 0 0 0 0 1 0 ? 1 0 ? 1 0 1 0 3 0 ? 0 1 0 0 ? ? 0 ? 2 1 ? 0 0 0 0 0 0 0 2 1 0 0 1 4 0 1 ? 1 ? ? 0 0 1 0 0 0 0 ? ? ? ? ? ? ? ? ? 1 1 1 ? 0 1 0 0 1 0 0
Tlayuamichin itztli	? ? 0 ? ? ? ? 2 0 0 1 ? 1 1 0 0 0 0 0 0 ? ? 1 ? 0 1 1 0 0 0 3 0 0 1 0 0 1 ? 0 0 ? 0 0 ? ? ? 1 0 0 0 0 2 1 0 0 0 0 0 1 ? 1 0 ? 0 0 1 1 0 0 0 ? 0 ? ? ? ? ? ? ? ? 2 ? 1 ? 0 1 0 0 0 0 -