Cornute Ceratocystis perneri removed a priori Vetulocystis catenata Yanjiahella biscarpa -Beidazoon venustum Herpetogaster collinsi Vetulicola cuneata Eocrinoidea Akadocrinus %Rhombifera Macrocystella Rhombifera Pleurocystites Eocrinoidea Ubaghsicystis Eocrinoidea Gogia 100% Eocrinoidea Lyracystis radiata Eocrinoidea Kinzercystis Crinoidea Aethocrinus 98% Edrioasteroidea Camptostroma <sup>30</sup>4Helicoplacus -Helicocystis moroccoensis 89% Edrioasteroidea Kailidiscus chinensis Edrioasteroidea Stromatocystites Solute Castericystis vali 100% Solute Coleicarpus sprinklei Mitrate Lagynocystis pyramidalis 58% Cornute Ponticulocarpus Mitrate Mitrocystella incipiens 91%Ctenocystoid Courtessolea └Ctenoimbricata spinosa Cinctan Bohemiacinctus havliceki Banffia constricta 88% Pterobranch Cephalodiscus └Pterobranch Rhabdopleura 100% Hemichordata Oesia ₩Enteropneusta Spengelidae Glandiceps └Enteropneusta Harrimaniidae Saccoglossus -Hemichordata Spartobranchus Hemichordata Gyaltsenglossus Rotadiscus Phlogites longus 90% Shankouclava anningense Leaf stability 89% Tunicata Ciona Unstable Cephalochordata Branchiostoma Amiskwia sagittiformis Stable

## Cornute Ceratocystis perneri removed a posteriori Yanjiahella biscarpa -Beidazoon venustum Vetulicola cuneata Eocrinoidea Akadocrinus 100% <sup>00</sup>4Rhombifera Macrocystella LRhombifera Pleurocystites Eocrinoidea Ubaghsicystis 999 Eocrinoidea Gogia Eocrinoidea Lyracystis radiata Eocrinoidea Kinzercystis 71% Crinoidea Aethocrinus Edrioasteroidea Camptostroma <sup>9</sup>Helicoplacus 97% <sup>©</sup>Helicocystis moroccoensis Edrioasteroidea Kailidiscus chinensis Edrioasteroidea Stromatocystites Solute Castericystis vali Solute Coleicarpus sprinklei Cornute Ponticulocarpus 100% 100% -Mitrate Lagynocystis pyramidalis -Mitrate Mitrocystella incipiens 94%Ctenocystoid Courtessolea OOT Ctenoimbricata spinosa Cinctan Bohemiacinctus havliceki Vetulocystis catenata -Banffia constricta



