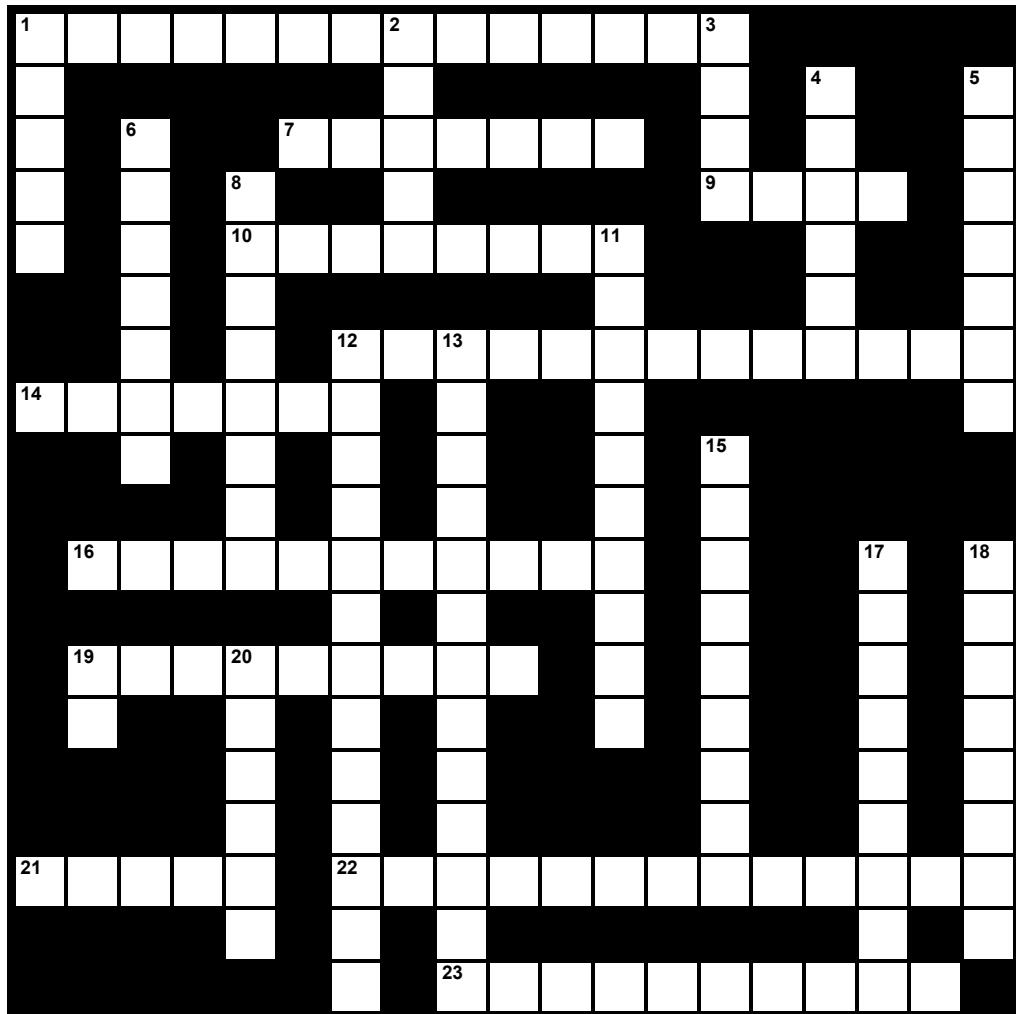


**2003-03-02\_Aquarium\_19x19**  
**B.B. Huria**



**Across**

1 Purification of water by forcing it through a semipermeable membrane which prohibits salts or impurities to pass. (7,7)

7 A naturally occurring ore which absorbs

ammonia and softens water. (7)

9 Partially carbonized vegetable matter saturated with water; can be used as a filter material to soften water and make it more

acidic. (4)

10 Rocks taken from the vicinity of a tropical coral reef with all of the life intact on them. (4,4)

12 In this form of a wet/dry filter water is dripped over some media

which is also exposed to the air, which promotes nitrification. (7,6)

14 A device which makes aquarium water cooler. (7)

**16** Fish which produce live young rather than laying eggs. (4,7)

**19** This is a small mechanical filter attached to the input to another filter to avoid clogging in the latter. (9)

**21** Plant-like chlorophyll-containing aquatic organisms lacking true stems and roots and leaves. (5)

**22** The process by which ammonia is changed to nitrite, then nitrate, and finally nitrogen gas. (13)

**23** Ultraviolet XXXXXXXXX X uses UV light to kill bacteria and other tiny organisms. (10)

**3** A receptacle that is placed under the main aquarium, to increase the system's total water volume, and to place various pieces of hardware, like pumps, heaters, reactors, probes, etc. (4)

**4** That is what the letter "G" stands for in acronym "UGF" meaning under XXXXXX filter. (6)

**5** A valve which produces bubbles by drawing air into quickly flowing water. (7)

**6** Its chemical formula is NH<sub>3</sub>. (7)

**8** With pH value above 7. (8)

**11** German word for water with calcium hydroxide dissolved in it. (10)

**12** Chemicals, just like vitamins, needed to be replenished in small amounts for aquarium creatures to survive. (5,8)

**13** Animals without backbones. (13)

**15** Living or active in the absence of free oxygen. (9)

**17** A mineral form of crystalline calcium carbonate, that makes up coral skeletons and coral sand. (9)

**18** Commonly used to keep bacteria out of municipal water supplies. It is poisonous to fish, but can be removed with special dechlorinating compounds. (8)

**19** A measure of how acidic or alkaline a solution is. (2)

**20** A device that removes something from whatever passes through it. (6)

## Down

**1** Acronym for reduction-oxidation potential. (5)

**2** A gas, which is used as a sterilizing agent to kill bacteria and small organisms in the