3rd INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

''CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD''

Shellfish Clams use Possibility

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Abstract

The Santa Catarina State is the main bivalve shellfish producer in Brazil. The total production (mussels, oysters, scallops) of 2009 was 12,462 tons. The Florianópolis is the city with the major shellfish production with 1,301 tons with 76.6% of the state oysters production and 3.12 tons and 57% of the scallops production. The mussels production corresponds to 558 tons and represents 5.25% of the state production. The calcium carbonate ($CaCO_3$) is the main material of the shells and it is the base material for several products. The waste of these shells results in a great waste of materials. This waste can promote the development of animals and insects that can transmit illness and environmental degradation. There are studies that demonstrate the potential of reutilization of these materials with a simple shell processing step to add value to the material. The products that can be made from the calcium carbonate source are: quicklime, hydrated calcarium, polymers charge, construction blocks, roads construction materials, paper paste, compact marble, fertilization, pesticides, food, ceramic blocks industry, paint industry, polyurethane foam, talcum powder, glass production, cement, varnishes, rubbers, soil correction and medicines.

Keywords: *molluscs, calcium carbonate, shells, reuse, environment.*