

OFFSHOOT (KEIKIS)

Propagation from offshoots is rare in commercial production, but it is possible to produce saleable plants within 1½ years using big healthy offshoots.

A major reason for the development of offshoots is damage to the roots of the plants, another is the oversupply of nitrogenous fertilizers during summer. Nonflowered immature pseudobulbs sometimes develop offshoots in spring and summer under high temperature conditions.

Those cultivars in which the lateral buds change their type of growth easily from reproductive (flower) to vegetative (offshoot) under high temperature conditions are not suitable for commercial production and should not be propagated.

When the offshoots reach 6 to 7 cm in length with 3 to 4 roots, they are removed from the stock plants and planted in pots.

DIVISION

In commercial production, division is not an applicable method of propagation except when necessary to maintain the stock plant, because the damage to the plant's roots requires a long time for recovery.

The Cultivation of the Aquatic Plant *Fontinalis antipyretica* and the Red Bee Shrimp

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CULTIVATION

Fontinalis antipyretica occurs between the tropical zone and temperate zones of the world. It is a species related to sphagnum moss and grows around wetlands or in water. The linear stem has many small branches between 1 to 2 mm in length. This species develops many branches and these branches intertwine with one another forming a complex plant. *Fontinalis antipyretica* attaches itself firmly to stones and drift wood and by making use of this characteristic, aquarists can arrange various layouts in their aquariums. The plant is also a good refuge for young fish, so many aquarists use this species for that purpose.

Culture Conditions. Water temperature, 18 to 28C; water quality, weakly acidic or weakly basic with a pH 6.2 to 7.5; soft or medium hard water of a hardness rating between 0 and 5.

CULTIVATION AND BREEDING OF CRYSTAL RED BEE SHRIMP

Aquarists usually keep bee shrimps (*Caridina* sp.) in their aquariums because they eat moss and clean the aquarium. The wild species of bee shrimp is a small 2- to 3-cm shrimp and originated in the Hong-Kong islands, but it seems that no wild stocks exist there any longer and cultivation has recently ceased. I found a crystal red bee shrimp mutant, the original species is black and white in color but the mutant is red and white. We are now trying multiplication and expect it will take 7 years from discovery to having stocks available for sale.