Preventing freshwater crayfish for market

How live crayfish are handled is of utmost importance in ensuring their survival during transport and in achieving the best market price.

Ideally all processes involved in preparing freshwater crayfish for the market should be carried out during the coolest part of the day to minimise temperature stress on the animals. They should always be handled gently as they are susceptible to stress and injury. Protect them from direct sunlight, to avoid damage to their eyes.

Gill washing

When crayfish are lifted from the water, they clamp the cover of their gills shut. This traps muddy ‘bottom water’ loaded with bacteria in the gill chamber, which can then pass across the gills and cause infection.

To allow crayfish time to relax their breathing and clear the gill chamber, they must be either held for two to three minutes in the upper layers of dam water (at least 15 cm below the surface if the dam is clear and the top water layer is warm) or placed in a tub of clean dam water.

Damaged or unsightly shells

Freshwater crayfish harvested from dams can suffer imperfections that are often unacceptable to the consumer. Crayfish with missing limbs, stains or blemishes on the shell can be sold as seconds.

Grade the fish carefully and do not mix the damaged ones with top quality product. If seconds are not required, return the lower grade animals to the dam, where they can moult and regenerate new limbs. Just-moulted crayfish have soft shells and should also be returned to the dam to avoid damage or death during transport.

External fouling organisms

It is not uncommon for freshwater crayfish to have small parasites living on their shell. Before treating these parasites, aeration should be provided and the crayfish rinsed in freshwater afterwards. Saltwater bathing will not remove the eggs of these parasites and if the crayfish still look unsightly, return them to the dam and leave them to moult.
Purging

Crayfish should be purged to remove any food from their gut that might affect their taste, or their ability to survive transportation. They should be left in clean flow-through tanks for a minimum of 48 hours, during which time they are not fed.

Flow-through systems have an advantage over recirculating systems for purging; the water carries the waste away preventing a build-up of toxic substances that may cause mortalities or alter the flavour of the crayfish. Biological filtration systems can be used when water is not readily available but caution should be exercised in their use.