Dry processed coffee has low quality, but wet processing needs a large volume of water, causing pollution. What is the solution?

A technology for wet processing using enzymes can improve quality and reduce water usage.

There are two major methods – wet and dry processing – to process harvested coffee beans. In the traditional method of dry processing, coffee beans are cleaned and dried under the sun for 7-10 days before they are husked,

In bad weather with too much rain and little sun, farmers have to dry coffee beans with driers, but this lowers the coffee quality if the temperature of driers is incorrect.

With the wet processing method, coffee beans are soaked while they are rubbed and put for fermentation, which lasts one to three days.

After that, they are cleaned, husked and dried. The advantage of the method is that it does not depend on weather conditions and runs more quickly.

However, Nguyen Van Lang, former Deputy Minister of Science & Technology, and former chair of Dak Lak province, the coffee metropolis of Vietnam, said both methods show weak points.

Dry processing coffee has low quality, while wet processing can only help a little in improving quality, but consumes much water and causes pollution.

Lang said he understood the difficulties of dry processing. "It is very costly to build yards for drying. One hectare of drying yard is needed for every 100 hectares of coffee. The yard is used for several months every year," he said.

Lang decided to join forces with Bui Van Luan to work on a wet processing coffee technology with enzyme which does not discharge water – bioecotec.

Harvested coffee beans will be sorted to eliminate impurities, cleaned and put into a system to separate nuts. After that, they will be put into static dryer for drying and covered with enzymes to accelerate the removal of mucilage.

Since farmers don't have to use water to remove mucilage, they can save money and minimize the impact on the environment.

Lang said bioecotec technology has been protected by intellectual property rights and used by many households in the Central Highlands.

Other research units in Vietnam have also mastered the wet processing technology with enzymes and proved the advantages of the method.

A research work by the Western Highlands Agro-Forestry Scientific and Technical Institute found that with 120-150 grams of enzymes, processing units can remove mucilage for one ton of coffee within the day. And if they keep coffee with enzymes overnight, they would need 50-60 grams of enzymes only.

Source: VietNamNet