

PROTECTIVE FOAM

Polyethylene protective foam can significantly reduce the following defects:

- field scraping,
- leaf and bunch cover rubbing,
- bruising at harvest,
- transport injuries,
- dehanding injuries.

There are two types of protective foam: **CIRCULAR** and **RECTANGULAR**.

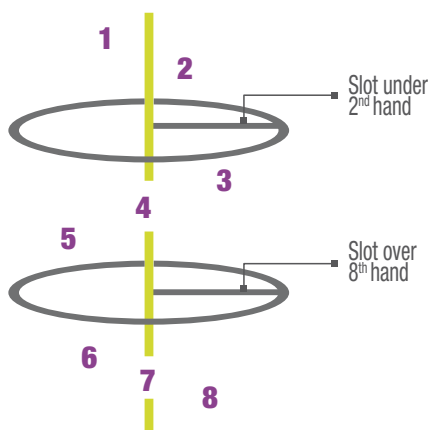
1. CIRCULAR FOAM DISCS



Circular foam discs - Photo IT2

1.1- Installation in the field

FOR BUNCHES WITH 7-8 HANDS



■ The discs are installed when the fingers are horizontal. This can be combined with flower removal in the field to hamper latex dripping. Bunches have to be monitored twice a week because the discs may fall if the hands are not sufficiently upright. Conversely, if the hands are too upright then the discs cannot be installed. This can be combined with other bunch maintenance activities.

1.2- Removal in the packing shed

■ Dehanding is done normally and the foam discs will protect the bananas from dehanding injuries. The discs can then be removed and stored on a PVC rod.

■ The discs can simply be rinsed with clear water. Flower removal in the field tends to make the discs dirty. The dirt can be quickly rubbed off with a pool cleaning glove for example.

■ The discs can then be put back on the PVC rods which are hung horizontally to dry. Each rod should contain enough foam discs for a full day of disc installation, resulting in easy storage to and from the field.



Foam discs stored on a PVC rod - Photo IT2



Rinsing tank - Photo IT2



Drying - Photo IT2

2. RECTANGULAR FOAM SHEETS



Rectangular foam sheet - Photo IT2

2.1- Installation in the field

■ The foam sheets can be installed from the 5 exposed hand stage to the last horizontal hand stage. This can be combined with counting and other maintenance activities, but the sheet protection should be monitored at least once a week.

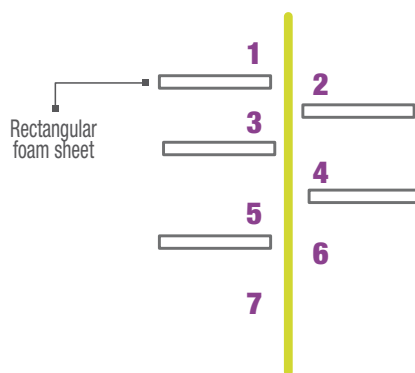


A close-up - Photo Banamart

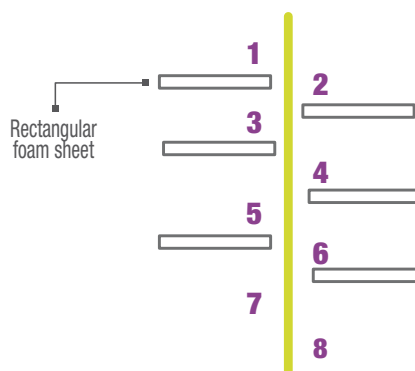


General appearance, early installation - Photo IT2

FOR BUNCHES WITH 7 HANDS



FOR BUNCHES WITH 8 HANDS



2.2- Removal in the packing shed

■ Dehanding can be done normally without removing the foam sheets beforehand. The sheets can be removed before dehanding but there is a high risk of tearing the sheets and loss of protection against dehanding bruising.

■ The foam sheets can simply be rinsed with water without rubbing if they are not coated with latex residue. The sheets can then be stored in bags (e.g. polybags) with holes to enable residual water drainage. It is then recommended to reuse the foam as soon as possible to prevent fungal and bacterial development.



Rinsing - Photo IT2



Storage - Photo IT2

3. PROTECTIVE FOAM COSTS PER BUNCH

3.1- BANAMART price data, May 2012

■ Each protective foam item can be reused 3 times on average (up to 6 times), with estimated losses of 10% for the first use and 20% for subsequent uses.

	Circular foam	Rectangular foam
Unit price	0.25 €	0.12 €
For an 8-hand bunch (3 reuses on average)	0.17 €	0.24 €

■ In order to limit the number of bunch maintenance operations, the protective foam installation should be combined with other activities, e.g. counting, bunch covering, dry flower removal, etc.

4. QUALITY IMPACT

■ Especially for first semester harvests when the flowering-to-harvest intervals are longer because of the lower temperatures, protective foam has a considerable impact, with a 10-20% increase in the label compliance rate and a very marked reduction in the waste rate.

■ Group supplies of protective foam.

Impregnated protective foam with organic repellent (containing garlic, pepper and clove extracts), is being tested by IT2 to reduce the impact of thrips.



PERSONAL NOTES:

