

# Släpduk™

- For safe and efficient application.



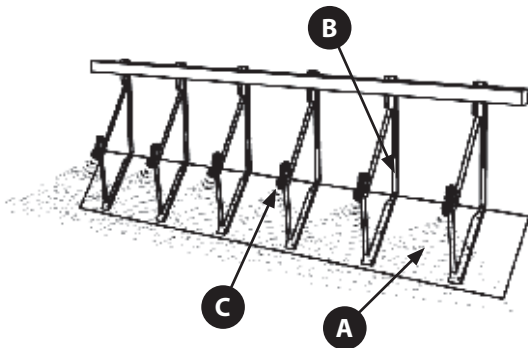
*Viby Teknik*

# Släpduk™

- To be mounted on new or existing sprayers.

The benefits of using Släpduk™ in crop protection are:

- ⌘ Increased capacity
- ⌘ Increased deposit within the crop
- ⌘ Better entrainment of droplets in the crop
- ⌘ Lower liquid rates and droplets can be used
- ⌘ Reduced drift
- ⌘ Shorter safety distances
- ⌘ Reduced doses
- ⌘ Less boom movements
- ⌘ Ensured effect of the treatment



## Design

Släpduk™, which is mounted on the boom consists of a stiff plastic sheet (A) and a number of springy parallelogram (B) on which the nozzle and nozzle bodies (C) are mounted. The parallelograms are attached to the plastic sheet with 33 cm spacing. The backward angling of the nozzles ensures an even spray distribution even though the distance from nozzle to the target are short.

## How it works

When spraying the parallelogram moves individually depending on the loading. During the movement the nozzle angle and the nozzle to target distance are constant, which ensures an even application. The force acting on the sheet while spraying reduces the movements of the boom in both horizontal and vertical direction.



## Adjustments

Släpduk™ can be used for different treatments in many crops. There are no more settings to handle than for a conventional sprayer.



### Established crop

In an established crop i.e. potatoe or cereal, the Släpduk™ are placed so the nozzle is on a level with the top of the crop. The Släpduk™ surfs gently in the crop which at the same time is opened which facilitates the entrainment and improves the deposit. When the crop are released from the sheet it makes a movement in the spray and the plant are well exposed to the chemical.



### Low crop

In a low crop weed control in cereal or sugar beets, Släpduk™ should be placed a few centimeters above the crop / ground. No movement of the crop occur but the short distance between nozzle and target reduces the drift.

## Deposit within the crop

The backwards angled nozzles and the fact that Släpduk™ opens the crop leads to a better entrainment and an increased deposit in the crop without increasing the on ground deposit. A better deposit in the crop is a prerequisite for using lower the chemical doses and while keeping the effect of the treatment.

## Biological effect of the treatment

Field trials have shown that the effect of the treatment are ensured if Släpduk™ are used, which means that lower chemical doses can be used. This is due to the fact that Släpduk™ :

- Improves entrainment and deposit within the crop.
- Low liquid rates can be used (from 75 l/ha) which reduces the time for filling the sprayer, and the optimal time for spraying can be better used.





## **Drift**

The distance between nozzle and target are important for the amount of drift, the shorter the better. By using Släpduk™ which have a short distance between nozzle and target the drift can be greatly reduced. The right hand side graph displays results from a drift study in Sweden. The results here describes the drift reduction achieved when Släpduk™ is used instead of conventional technique, under different conditions. Smaller droplets will give a better coverage on the pest and thereby a better effect. The lower liquid rates makes a greater effectiveness in spray work, the optimal time for treatment can be better utilised. With a Släpduk™ mounted, smaller liquid rates and droplets can be used without the risk of drift. The crop protection will be safer and more effective using Släpduk™ when spraying.

## **Safety distances**

The great reduction of drift that are achieved by using Släpduk™ leads to shorter safety distances when spraying. In Sweden the Släpduk™ is mentioned in the regulations from the Environmental protection agency, as a technique which allows shorter safety distances in wind direction.

# *Viby Teknik*