

## PP/ JUTE GROUND COVER



Weed around the plant significantly impacts plant productivity and produce quality. Weed competes with the plant for water and fertilizers. It creates two-fold problem, one the input cost increases, as more than needed is to be supplied and second productivity and quality is reduced. So overall output efficiency decreases. Hence weed elimination becomes very important. There is various type of mulch currently being used in application. Black Polyethylene (PE) plastic film and synthetic textile mulch mat are two most popular mulch products. PE plastic film has a disadvantage of fragmentation and mixing with soil during its removal. It leads to fragments of film trapped in the soil which decreases the soil fertility. Film is mostly popular due to its lower cost. However, if we consider environmental cost plastic film for mulching application is not advisable. Alternatively, Agrotextiles mulches, permeable fabrics made from polypropylene or bio-degradable materials like jute and other fabrics, are most effective in modifying soil environment, suppressing weed and increasing crop yield<sup>1</sup>. Synthetic textile mulch mats are able to address the drawback of mulch film up to e.g. Textile mulch is strong enough not to break/tear during its removal thus doesn't create any problem of mixing with soil. However, being synthetic in nature environmental

cost can be very high in absence of proper recycling mechanism. Naturally occurring jute agrotexiles are eco-friendly and biodegradable products which act as surface cover materials and useful ameliorative to eliminate soil related constraints to crop production<sup>2</sup>. However, studies have reported that in order to get an effective result, jute mulch should be prepared in higher GSM. Higher GSM makes poses two major challenge one handling and other cost competitiveness. Synthetic textile mulch mats are lighter and cheaper in comparison to the jute mulch mats. SASMIRA Developed PP/Jute Ground Cover stands in between the existing synthetic and natural jute products. The product has been developed under Ministry of Textiles, GoI supported R&D Project.

**Fabric Specification:**

Material: Jute, Polypropylene (PP)

Composition: Jute (72-80%) and PP (20-28%)

GSM: 320-350 gm/m<sup>2</sup>

Warp: PP Tape

Weft: Jute

Manufacturing Technology: Circular Weaving

Application: Mulching

**Contact Details**

The Synthetic & Art Silk Mills' Research Association (SASMIRA)  
Sasmira Marg, Worli,  
MUMBAI - 400 030, INDIA  
Tel: +91-22-24935351  
Email: [project@sasmira.org](mailto:project@sasmira.org)  
Website: [www.sasmira.org](http://www.sasmira.org)