AISD Fashionista

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Issue Content; **Fashion and Film**

Agro Textiles

Colour Service

Fashion Forecasting



Fashion and Film

The relationship between fashion styling and fashion trends in movies is complementary to each other. In Europe and the United States, the shows of major brands each season are closely related to the movies released each year. The Oscars, Cannes and other film awards have "best costume award", which also proves that film and fashion are closely related. Clothing can express the characteristics of the time and the background of the story with the style of the outside. It can also express the psychological characteristics of characters and express the emotional basis with the colour mean-

ing of the inside. In the same The interaction of culture scene, costume changes can also be used to show the time and promote the development of the plot. So, costume is a very important aspect filmmaking.

Film Fashion and Culture:





and fashion is wellrepresented in film and television. The clothes and accessories people choose to wear reveal a lot about their personalities and the cultures in which they were raised. In addition, personality style, a new trend that acknowledges the relationship between culture and fashion, was produced by movies and television.

> N. Kanagaraj, M.VOC II year

From the Editor-in-Chief's Desk



Editor-in-Chief Dr.B.Dharmalingam Professor & Director **AISD**

The aim of ALU AISD Fashionista, carries extensive information on new products & emerging technologies in the Textile and Fashion areas which helpful to the academia, students, researchers and industry personnel. It is intended to bring out the hidden literary talents of our students and also inculcate authoring skills to them. It is constantly exploring ways and means of serving the fashion industry with information, which is vital for survival in today's environment of growing competition.

This magazine provides a platform for students and staff to share information, spread the latest technical knowledge and cultivate right ways that will equip all of us to stay competent in our fields of study and research. This ALU AISD Fashionista magazine (Volume-I, Issue-I) includes current topics such as Fashion and Film, Agro Textiles, colour services, fashion forecasting Through this issue our B.Voc and M.Voc Fashion Technology students proved their talents and it shows their strength of academic activities of the department.

AGRO TEXTILES

INTRODUCTION:

Agro textiles are the application of textile materials in those sectors. It is a very much important segment of Technical Textile. Agriculture, forestry, horticulture, floriculture, fishing segments, landscape gardening, animal husbandry, aquaculture and agro-engineering all these sectors combined together are popularly called as Agro-tech sector. The word "AGRO TEXTILES" is now used to classify the woven, non-woven and knitted fabrics, applied for Agro tech industries including livestock protection, shading, weed and insect control and extension of the growing season. With the continuous increase in population worldwide, stress on agricultural crops has increased. So it is necessary to increase the yield and quality of agro-products. But it is not possible to meet fully with the traditionally adopted ways of using pesticides and herbicides. Today, agriculture and horticulture has realized the need of tomorrow and opting for various technologies to get higher overall yield, quality and tasty agro-products



Green House

CLASSIFICATION OF AGRO TEXTILES:

Agro textile can be classified according to areas of applications. These areas of applications .these areas are broadly identified as

- Agro textiles for crops production
- Agro textile for horticulture, floriculture and forestry.
- Agro textile for aqua culture
- Agro textile for agro engineering related application.

FIBERS USED IN AGRO TECH INDUSTRIES

- Nylon
- Polyester
- •Polyethylene
- Polyolefin
- Polypropylene
- •Jute
- •Wool
- •Coir
- •Sisal
- •Flax
- •Hemp

Though manmade fibers (like poly-olefins) are preferred for agro-textiles than the natural fibers mainly due to their favorable price performance ratio, light weight with high strength and long service life, but natural fibers can be used in agro-textiles in some specific arena where characteristics like high moisture retention, wet strength, biodegradability are effectively exploited

PROPERTIES REQUIRED FOR AGROTEXTILES:

TENSILE STRENGTH:

The tensile strength of shade nets can be a deciding factor of its long term durability and service life. Hence good tensile strength is necessary parameter for shade nets.

WITHSTANDS SOLAR RADIATION:

Agro textiles are laid over the cultivated areas immediately after sowing or planting. For such application Agro-textiles has to withstand solar radiation with varying surrounding temperature.

WITHSTANDS ULTRAVIOLET RADIATION:

The Non visible radiations include ultraviolet radiations (UV) radiation leads to degradation of molecular chains. No single material is resistant to all radiations polypropylene and polyester are more resistant to UV radiations when used as an outdoor material, polyethylene is treated with the appropriate UV stabilizers. Potential to reduce the impact of UV radiation on plants by light absorbing or light-reflecting non-woven (light permeability: 80 to 90% to allow photosynthesis to take place).

BIO DEGRADABILITY:

Natural fibers like wool, jute, cotton are also used where the bio-degradability of product is essential. Natural polymer gives the advantage of bio-degradation but has low service life when compared to the synthetics.

ABRASION RESISTANCE:

The abrasion to which a shade net is subjected may be of the material itself (material to material) or stray animals. Abrasion of the shade net would result in holes though which animals and pests could enter the structure and harm the crops good abrasion resistance is required of shade nets.

HIGH POTENTIAL TO RETAIN WATER:

This is achieved by means of fiber materials which allow taking in much water and by filling in superabsorbers. While non-wovens meant for the covering of plants show a mass per unit area of 15 to 60 gm/m2, values between 100 and 500 g/m2 are reached with materials for use on embankments and slopes.

PROTECTION PROPERTY:

It must have the properties of protection from wind and creation of a micro-climate between the ground and the non-woven, which results in temperature and humidity being balanced out. At the same time, temperatures in the root area rise. This is what causes earlier harvests, sufficient stiffness, flexibility, evenness, elasticity, biodegradability, dimensional stability and resistance to wetness. Fungicidal finish (up to 2% of the total mass), which avoids soil contamination.

RESISTANCE TO MICROORGANISMS:

It must resistant to microorganism to protect the living being.

STABLE CONSTRUCTION:

The construction must be such that it must be stable for any application.

LIGHTWEIGHT:

The weight of the fabric should be such that it will bare by the plant.

AGRO TEXTILE PRODUCTS

Agro textile products can be broadly classified based on the technique of their production into:

- Woven Products
- Knitted Products
- Non-Woven Products

WOVEN PRODUCTS

A special weaving machine called a Sulzer projectile weaving machine is used to weave the textiles into a range of light, heavy and wide-width fabrics. Nets with a mesh width of 1.8mm to 40mm are woven using these machines. Other machines such as air jets and rapier weaving machines are also used based on the required weaving width of the products.

KNITTED PRODUCTS

Two types of knitting mainly Warp knitting and the Weft Knitting techniques are commonly used to knit the fabrics into protective agro-nets. Nets from yarns are knitted using Rachel machines.

NON-WOVEN PRODUCTS

Non-woven fabrics can be produced from numerous techniques including needle-pinched, Stitchbonded, thermally bonded, hydro entangled nonwovens, spun-bonded, and/or wet nonwovens

APPLICATIONS OF AGRO TEXTILES:

AGROTEXTILES FOR PRODUCTION OF CROPS:

The selection of Agro-textile product is depends on crop needs. Selection of the agro textiles is also greatly influenced by the geographical location. Some of the applications of agro textiles are as follows:

SUNSCREEN NET:



The Warp-knitted nets are used in order to protect fields and greenhouses from the intense solar radiation for healthy plant growth and good harvest. Sunscreen nets with open mesh construction are used to control sunshine and amount of shade required. These net fabrics allow the air to flow freely. So the excess heat does not built up under the screen. The percentage of shadow varies according to the density of threads. The current offer 45%, 65% & approximately 85% shadow

BIRD PROTECTION NETS:

Knitted monofilament nets (Open knitted nets for crop protection) offer effective passive protection of seeds, crops and fruit against damage caused by birds and a variety of pests. Openmesh net fabrics are used as a means of protecting fruit plantation. The special open structure repels birds, provides minimal shading and excellent air circulation - allowing plants to flourish, whilst avoiding the risk of dangerous mold developing on the fruit.



PLANT NET:

Fruits, which grow close to the ground, can be kept away from the damp soil by allowing them to grow through vertical or tiered nets in order to keep the amount of decayed fruit to a minimum. These are made from polyolefin type of fiber.



GROUND COVER NET:

Ground cover is an extremely versatile land-scaping and horticultural fabric for long-term weed control, moisture conservation and separation. It effectively suppresses competitive weed growth, conserves ground moisture, maintains a clean surface, protects from UV rays and creates a favorable environment for healthy plant growth. Ground covers can reduce the costs and minimizes undesirable herbicide use. It is mainly used in Borders & rockeries, nursery display areas, greenhouse floors, soft fruits beds & orchards, paved areas, horse bridleways & seed harvesting areas. 100% polypropylene is used.



I.Shallini II B.Voc. FT

WINDSHIELD /WIND PROTECTION NETS/WIND-BREAKS:

Windshields are used in farming to protect fields of young plants, fruits, trees or the harvest from being damaged by the wind. Erecting wind-breaks at right angles protects the young seedlings and the mature plants from dying out and being broken. The nets used here reduce the effects of high winds and even help to keep out airborne sand and salt in areas close to the sea. Protecting plants from high winds also encourages plant growth and reduces the number of irrigation cycles required. It also prevents plants being cooled by wind too



ROOT BALL NET:



It is extremely important for safe and speedy growing of young plants such that root system is not damaged when they are dug up, transported or replanted. Normally the root balls are wrapped in cloth. When the plants are transplanted, the nets on the outside do not have to be removed since the roots can protrude through the nets.

AGRO TEXTILES FOR HORTICULTURE AND FLORICULTURE:

Application of textile materials in horticulture is growing fast. Nets, non-woven mats, movable screens for glass/poly houses, non-woven sheets, mixed bed for mushrooms, cordage and strings are used in horticulture. Nets are also used for protection against hailstorms, intense sunrays, etc. Light resistant woven and non-woven polyester fabrics are used in the inside of green house to protect the plants from extreme hot or cold conditions. They are also used on the outside of the green houses as screen to control sun light



AGRO TEXTILE FOR ANIMAL HUSBANDRY:



Nylon and polyester identification belts are used for cows. Textile nets are used to support the large udders. Non-woven fabrics are used to filter the milk in automatic milking systems and as an underlay to reduce mud on cattle paths and trails.

AGRO TEXTILE FOR ANIMAL HUSBANDRY:

Fishnets are used for fishing and in fish farming. Warp knitted knotless nets results in low energy expenditure when the net is used for fishing. They are mainly produced from Nylon monofilament, multifilament or HDPE



C. Kanimozhi M.Voc I Year

colour service

Fashion and Textile industry professionals who meet twice a year to pool their knowledge of color cycles and preferences and to project color trend for the future. Yarn colors or swatches are sent to designers and merchandisers to plan their color stories and purchase fabrics.

Examples of some color services

1. Association Internationale de la Couleur Web Address



- 2. Pantone, Inc. Web Address
- 3. International Color Authority Web Address
- 4. The Color Marketing Group Web Address
- 5. Huepoint Web Address
- 6. Color Portfolio, Inc. Web Address











Fashion Forecasting

What is Fashion Forecasting?

Predicting what new fashions will come in the future by observing past fashion trends is called fashion forecasting. Through this, it is known what new designs will come in the future. For this reason, this forecasting is done by considering various situations including future trends, people's demands.



Steps for Developing Fashion Forecasting:

- 1. Past analysis should be done.
- 2. Research should be done on the fashion of the past.
- 3. Determining the reasons why past fashions changed.
- 4. Determining how closely the forecast matches the past.
- 5. Researching how likely fashion will impact the future.
- 6. Applying fashion forecasting techniques.
- 7. Monitor regularly and check if it recedes.
- 8. And lastly revise again and again

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