

Small plant begins to sprout from ground.

[TEXT OVER IMAGE] Plants

Then we cut to a combine harvester ploughing a field

[TEXT OVER IMAGE] Plants

We then rise up over a crop field with hills in background bathed in sunlight

The video then shows green olives tumbling

[TEXT OVER IMAGE] are the basis of food

Followed by corn on the cob being sorted by people wearing blue gloves and white coats on a production line

[TEXT OVER IMAGE] are the basis of food

Then we cut to Wheat grass glowing in sunshine

We then move to show cows grazing in field golden in colour from the sunshine

[TEXT OVER IMAGE] feed

Then it shows cows being fed in a farm

Followed by a person in dungarees sorting through wheat grass over moving production line

[TEXT OVER IMAGE] bio-based products

Cut to a close up of bubbling green liquid in test tubes.

[TEXT OVER IMAGE] and renewable energy

Then we fly over a valley of trees between green mountains with blue skies above.

We then move to flying over flooded fields of crops where we can just see the tree lines rising from the water.

[TEXT OVER IMAGE] climate is changing

Then we see clip of trees being blown around by wind and heavy rainfall.

[TEXT OVER IMAGE] climate is changing

We then move to a fast time laps of clouds crossing snow topped mountains and the snow melting.

[TEXT OVER IMAGE] climate is changing

Then we are shown a clip of dead, dry crops.

[TEXT OVER IMAGE] yield losses

This cuts to clip of a hand picking up a part rotten, dried out aubergine

[TEXT OVER IMAGE] food insecurity

Then we see 2 sets of hands picking up and breaking apart dried brown mud.

[TEXT OVER IMAGE] scarcity of natural resources

Following this, we are shown a small plant with green leaves growing through cracked, dry soil on plain of dried ground.

[TEXT OVER IMAGE] scarcity of natural resources

Then we are shown a short clip of 1 male and 1 female scientists in a muddy field using a tablet computer wearing white coats and goggles.

[TEXT OVER IMAGE] scientists try to face the global challenges

Followed by a man with a younger woman and man standing surrounded by tomato trees looking at a tablet computer screen wearing checked shirts and jeans.

This moves on to seeds spouting on a white surface

[TEXT OVER IMAGE] plant phenotyping offers innovative tools

The video then moves into the laboratory and we see dry and green wheat grass growing under heat lights in an industrial greenhouse.

[TEXT OVER IMAGE] to help understand the interaction

Then we cut to a clip of a combine harvester in a wheat field with a man in dungarees checked shirt and hat standing in foreground with DNA ladder projected over image.

[TEXT OVER IMAGE] between genotypes and environment

The video then becomes more computer generated and we see a holograph of a plant with projection measurement lines around it.

[TEXT OVER IMAGE] to better select new varieties for breeding

Then we see someone looking at a simulated plant on a computer screen in a lab and using the mouse to see the plant in different simulated positions on the screen.

[TEXT OVER IMAGE] to better select new varieties for breeding

We then see the plants in a laboratory on a conveyer belt.

Cutting to fish eye aerial view of plants in the greenhouse being selected and moved by robotic machines and taken into the laboratory X ray machine area.

[TEXT OVER IMAGE] using different types of infrastructure and technology

We are then quickly shown a person in a checked shirt flying a drone over a dry wheat field. [TEXT OVER IMAGE] developing field analysis

Then we zoom into a computer generated image of X rayed wheat.

[TEXT OVER IMAGE] combining and analysing different data for plant modelling

We then go back to being shown the conveyer belts of plants in greenhouse and moving along through the laboratory then one plant stopping and being raised and spun around before continuing moving multiple plants.

[TEXT OVER IMAGE] monitoring plant growth

This changes to a wider picture of many plants in rows of white pots in the greenhouse laboratory

[TEXT OVER IMAGE] EMPHASIS integrates access to pan-European plant phenotyping infrastructures

We then see a person with long curly hair in ponytail carrying a box of vegetables through a field.

[TEXT OVER IMAGE] EMPHASIS on plants

Then we see a clip of 2 people one male in an apron and one female in a hat selling fruit and vegetables in a greenhouse to a person with curly hair carrying a basket bag on her shoulder.

[TEXT OVER IMAGE] EMPHASIS on plants

Then we go to an image of the world from space with computer generated geometric lines over Europe.

[TEXT OVER IMAGE] integrating the plant phenotyping community, then the geometric lines disappear and the world EMPHASIS is about the text.

Lines then clear and the EMPHASIS logo [green lines over the word with EU stars over half the word] appears over picture of the globe.

Picture then fades to a white background with EMPHASIS logo in centre, ESFRI logo in bottom left corner, European Commission logo in bottom right corner and the text "Emphasis is an ESFRI listed project supported by the European Union" in the centre of the page at the bottom.