

## Photo-Reflective Mulches For Saving Water in Agriculture

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**Abstract :** Photo-reflective films represent, in the panorama of agricultural films, a valid support for Spring and Summer cultivations, both in open field and under greenhouse. In fact, thanks to the high reflectivity of these films, thermal aggression, that causes serious problems to plants when traditional black mulch films are used, is avoided. Yellow or silver colored photo-reflective films protect plants from damages, assure the mulching effect, give a valid support to Integrated Pest Management and, according to recent trials, greatly contribute in saving water. This further advantage is determined by the high water condensation under the mulch film and this gives rise to reduction of irrigation. Water saving means also energy saving for electric system of water circulation. Trials performed at different geographic and ambient context confirm that the use of photo-reflective mulch films during the hot season allows to save water up to 30%.

**Keywords :** photo-selective mulches, saving water, water circulation, irrigation

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