The ‘rainfast’ period of a pesticide is the point at which rainfall or irrigation no longer reduces the performance of the product. The sprays have dried, or the active ingredient has absorbed into the plant and cannot be washed off. Herbicide labels commonly provide information on rainfastness. This is important since the product must be held on the leaf for a certain amount of time to get adequate uptake of the active ingredient into the plant.

Insecticide labels often do not give a rainfast period. I checked the labels of 13 field crops insecticides [Asana, Baythroid 2, Capture 2EC, Decis 1.5EC, Dimethoate, Furadan, Lorsban 4E, Mustang Max, Pounce 3.2EC, Provado 1.6F, Sevin 4F, Warrior]. None list a rainfast period, and few discuss the effect of rainfall or irrigation. For example, the Capture label says ‘Do not make applications to corn if heavy rainfall is imminent’. The Baythroid 2 label states the obvious: ‘Do not apply in the rain’. In lieu of any information on the label, the best bet is to assume that an insecticide is rainfast once sprays completely dry. Many insecticides kill by contact, so insects are exposed at the time of the treatment, dying within minutes or hours of exposure. Thus rainfastness isn’t necessarily as important a factor for foliar insecticide sprays as, say, rate or coverage. For residual control of insects, the important factor is UV exposure, as insecticide residues on the plant surface break down faster in direct sunlight than under cloudy conditions.