"Clover" Barry Tickes University of Arizona

Clovers can be very difficult to control weeds here, but it is also a major crop and common ornamental. Clovers can survive under poor growing conditions and are not controlled with glyphosate and seem to get worse every year. There are more than 50 types and 300 species of clover and they can be easily misidentified. They are all in the legume (Fabracea) family and can use a bacteria (rhizobium) in the soil to convert nitrogen in the atmosphere to a form that they and other plants can use for fertilizer. There are only 4 or 5 clover species that are agricultural pests here. The ones we get the most questions on are white and yellow sweet clover. These are in the Melilotus family. White sweet clover (Melilotus albus) is tall for a clover and can get 3 to 5 foot in height. The leaves are thinner than most clovers and this difficult to control weed lives at least 2 years and sometimes longer. Glyphosate and most of the contact herbicides do not control it. The plant growth regulator herbicides work best. Yellow sweet clover (Melilotus officinalis) is less common here. The flowers are yellow, and it is not as tall and vegetative as white sweet clover. Yellow is more common at higher elevations. California burclover (Medicago polymorpha) and Black medic (Medicago lupina) are in the same genus as alfalfa and are more of a problem in landscapes, parks and golf courses than in agricultural fields here. They do not grow upright and spread below the crop or turf. The true clovers are in the Trifolium genus and include white and strawberry clover. These creep along the ground and root at the nodes of the stem. These are more of an urban landscape weed and not considered an agricultural problem. Creeping woodsorrel or Oxyalis looks like a clover but it is not related. It is a turf weed that spreads rapidly along the ground and can live for several years. Preemergent herbicides are effective against all of these clovers before they become established. The postemergence herbicides that are most effective in controlling these clovers are the plant growth regulators. Contact herbicides and glyphosate are generally ineffective.