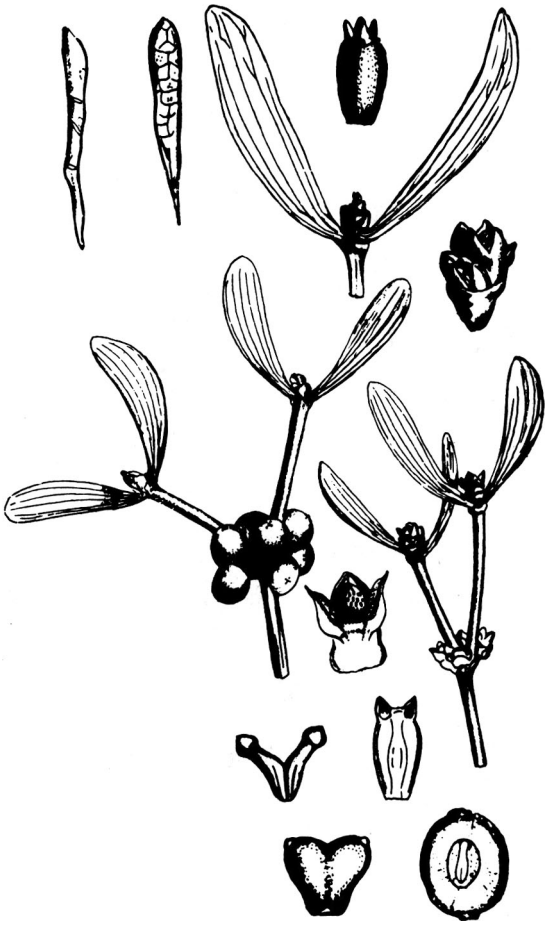
363. *VISCUM ALBUM* L. (LORANTHACEAE) — European Mistletoe



According to Keough,[333] recent research shows that extract of mistletoe, long a folk remedy for cancer, is effective against the growth of cancer cells. A tiny amount prolongs the lives of leukemic mice. Cancer cells treated with mistletoe extract were unable to form new colonies in laboratory cultures. In Germany and Austria, a derivative is used in post-operative treatment following many types of cancer.[333] According to Morton,[50] "It is known to possess narcotic, hypotensive, antispasmodic, tumor-inhibiting and thymus-stimulating activity." The tumor-inhibiting activity of the drug is due to the presence of a basic protein complex. Several protein fractions showing marked cancerostatic effects in extremely low doses (0.006 to 0.05 mg/kg) have been isolated from the press juice of the plant; some of the fractions were specific for malignant HeLa cells. Tumor-inhibiting activity of the fractions was independent of the toxicity.[1] Iscador is a natural fermentation product of plant juice of viscum, and is used "in human cancer therapy." It appears to be a good adjuvant for the induction of antibody formation and delayed hypersensitivity. Protein fractions induce splenomegaly and thymus hyperplasia in tumor-bearing mice all the while inhibiting tumor growth.[334] In spite of reputed toxicity, mistletoe is cut for winter feed for cattle; the fruits are used in decorated confectionary; the starch-containing stems are dried, ground, and mixed with rye to make bread in times of scarcity.[1] Berries once a source of bird lime. The Druids believed that mistletoe protected its possessors from all evil. Tea from this plant was sold in "health food stores" at about 15¢ an ounce in 1977.[335] Perhaps it is popular because it was believed to be useful in cases of sterility in the older herbals.