

## ZOOLOGY

## Strange Hybrid Sheep Results From Bighorn Cross

**A** COUPLE of years ago a band of range sheep belonging to the Pitchfork Ranch in Wyoming was grazing under the shadow of the Rocky Mountains, when a bighorn ram from a flock of wild mountain sheep came down from the high peaks and mingled with the domestic ewes.

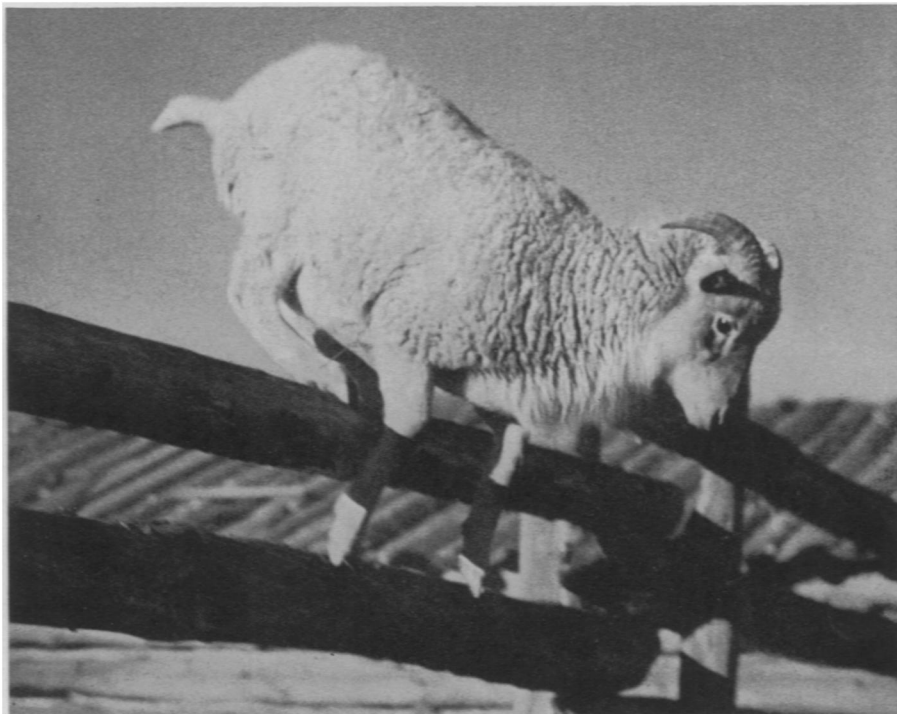
For years, the stories current among shepherders of the West about the crossing of the bighorn mountain sheep with ewes of domestic flocks have been passed off largely as fanciful tales of a lonely shepherd's imagination. Rarely, if ever, has a specific case been produced. A few years ago a sheepman of Colorado sent five newly born lambs representing a cross between a Rocky Mountain bighorn and his domestic sheep to the Colorado Museum of Natural History. These had died within a few hours of birth.

Other similar cases have been reported, but in every instance the hybrid lambs did not have sufficient vitality to survive more than a few days at the most.

At the time that the bighorn ram strayed into his flock, the herder told his camp tender about it and predicted that at least one lamb would make its appearance during the next few months. As soon as the herder had seen the intruder he had chased him back to his own kind far up the snow-capped peaks. Early in the following spring, an odd-looking lamb made its appearance and was promptly taken to the home ranch, for early April is no time for a young lamb to be out on the storm-swept ranges of Wyoming. The balance of the ewes were not to have their lambs till a month later.

For the first few weeks of its life the lamb was weak and sickly and two months passed before it began to look strong and thrifty. It had the characteristic brown spots of the mountain sheep lamb and its coat seemed to be part hair and part wool. The coat of the bighorn sheep is dark-colored hair, not unlike that of a deer.

The actions of this strange youngster have never been those of a domestic lamb. It has the characteristics of its male parent. The lamb prefers to mix with a small herd of goats on the ranch and frequently jumps up on a pile of logs or on the roofs of the low ranch buildings. With apparently



OVER THE TOP

no effort at all it can hop over a six or seven foot corral fence. Another curious fact about this creature is that its tail is only about one-third the length of the tail of a domestic lamb.

It is a well known fact that the bighorn sheep is one of the hardest of animals, grazing as it does all the year

round on the roof of the continent. It is not beyond possibility that this cross might be the start of a new breed of domestic sheep that will stand the rigors of Wyoming or Montana winters even better than the merino or rambouillet ewes.

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## PLANT PHYSIOLOGY

## To Plants Red Light Means "Go" But Green Is "Stop" Signal

**R**ED LIGHT doesn't mean "stop" to plants in the food-manufacturing business; it means "go ahead." Green light comes nearer to signifying "stop" to such plants. Blue is another "go ahead" light.

These facts were developed in a research project by W. H. Hoover of the Smithsonian Institution. He caged young wheat plants in a glass vessel, through which air could flow at a controlled rate. He passed the light received by the plants through filters that took out all but certain chosen wavelengths, all maintained at the same level of energy-intensity.

The ingoing amount of carbon dioxide, out of which green plants

manufacture primary foods, was definitely known. Analysis of the outgoing air showed how much of it had been removed by the plant in the food-manufacturing process. The less carbon dioxide coming out while a given color of light was on, the more efficient that light as an energy source for the plant's work.

Most efficient of all wavelengths tested was found to be in the red, close to the border of orange, at a wavelength of 6550 Angstrom units. Low efficiency was reached at about 5500 Angstroms, in the green. A second peak of efficiency came in the blue end of the spectrum, at a wavelength of 4400 Angstroms. Dull red light at less than 7500 Angs-