

back from the present strand line. Tibia and tarsus were the parts retrieved here by Dr. F. C. Clark, of Santa Monica. The two segments were assigned to the same species on purely biological grounds, there being no immediate proximity within the matrix.

Later an almost exact duplicate of the tarsus was taken at Arnold's Lumber Yard locality in San Pedro thirty miles to the southeast. Here also were found specimens of a femur that were ascribed to the same species, again on purely biological grounds. The specimen from Ventura is considered to be of Lower San Pedro age, whereas the former specimens are from Upper San Pedro. Just what is the time hiatus between Upper and Lower San Pedro remains uncertain, but there is evidence of considerable orogeny having taken place in the interim. This was very generously checked for me by Dr. U. S. Grant in oral discussion of the Ventura area. Bird species are apparently of rather long life span compared with mammals, hence there appears no cause for challenge of identity on the basis of age. Molluscan species associated in the matrix include *Nassarius fossatus* Gld., *Olivella pedroana* (Conrad) and *Cryptomya californica* Conrad.

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WHY DANDELIONS?¹

A RECENT investigation at the Massachusetts Agricultural Experiment Station has thrown more light on the food value of the common dandelion.

Dandelions in the form of greens have had a place in our diet in the spring of the year for generations. The indulgence in green foods of this kind was very appropriate after a long winter diet of cured or preserved foods. The literature, however, confirms the suspicion that people ate such things largely because they liked them and not because of any specific knowledge of their nutritional value.

Results obtained at this station have shown the dandelion to have a high protein (15.76 per cent.) and a very low fiber (9.79 per cent.) content, accompanied by a high ash, and to contain such minerals as calcium and phosphorus in abundance.

A comparison has been made of the amounts of

some of the minerals with that found in other vegetables commonly used as greens.

(Dry matter)	Ca Per cent.	Mg Per cent.	P Per cent.
Dandelions	1.60	0.46	0.51
Mangold leaves ²	1.20	0.89	0.18
Lettuce (common) ²	0.59	0.20	0.26
Cabbage leaves ²	1.82	0.33	0.28
Spinach ²	1.40	0.62	0.36

² Analyses given in "Compilation of Analyses," Massachusetts Agricultural Experiment Station, 1919.

The dandelion contains much more phosphorus than any of the others listed and is exceeded only by cabbage leaves in calcium and by mangold leaves and spinach in magnesium. Spinach, probably the most popular of those mentioned, is slightly lower than the dandelion in content of calcium and significantly lower in phosphorus. The dandelion can therefore be rated as an excellent source of these minerals. Perhaps we may therefore say that our taste is not as fallacious as we sometimes think.

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DR. BRITTON'S INTEREST IN MINING AND GEOLOGY

DR. H. H. RUSBY's excellent obituary of N. L. Britton, in your August 3 issue, omits something that would have thrown interesting light on the story of how the Director of the Botanical Garden, to avoid an annoying delay, went out and personally ran a rock-drill for several hours. N. L. Britton graduated from the Columbia School of Mines, with the degree of engineer of mines, with class of 1879. Presumably he took the mining course because it was the best curriculum in general science that Columbia College then offered. From 1879 to 1887 he was assistant in geology in the School of Mines, becoming instructor on botany in the latter year. Although it is therefore not remarkable that he was competent to run a rock-drill, he was, nevertheless, a man of wide as well as great ability.

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SCIENTIFIC APPARATUS AND LABORATORY METHODS

IODINE-POTASSIUM-IODIDE, AS A FIXATIVE AND DIFFERENTIAL STAIN¹

IODINE-POTASSIUM-IODIDE, prepared according to the usual formula of one gram of iodine crystals, two

¹ Contribution No. 192 of the Massachusetts Agricultural Experiment Station.

¹ Presented before the Biology Section of the Virginia Academy of Science, April 23, 1931.

grams of potassium iodide and 300 cc of water, was found to be useful as a fixative and differential stain in studies on the germination of conidia of the Peronosporales. Its value in this connection was discovered while studying the relation of time and temperature to the rate and percentage of germination of conidia of *Peronospora effusa*. In these studies drops of a suspension of conidia in water were placed on