aj

W

w

p

w

ve M

m

CV

in th

sit

de

de

to

pa

nu

or

is

am as

yel

gei

the

 \mathbf{mi}

and

int

spo

me

but

ma

wh to

cor

epi

than to pulse; the Greeks found by experience that crops growing on high lands were seldom attacked by this disease, but that when situated in hollow places, surrounded by hills, where the winds could not get at them, they were more frequently infected. To the Romans the mildew was known under the name of "rubigo." Pliny in his "History of Plants," tells us, that the prevailing opinion was that this disease arises from certain dews settling upon the corn and obtaining a burning quality from the intense heat of the sun. He, on the contrary, thought that the disease arose from cold, and that the infection first occurred during the absence of the sun, and always about the new or full moon. Columella says that mildew is induced by hoeing grain crops during wet weather. Horace in his Odes speaks of it as the "sterile rubigo" and Virgil alludes to it in his Georgies :

" Mix et frumentis labor additus, ut mala culmos, Esset rubigo, &c."

The Greeks and Romans were conscious of the destruction it would inflict on their crops, and regarded it as an instrument of vengence directed by a partienlar deity, to whom they applied the same name as that by which the plague was known. A festival to propitiate this deity, entitled *Rubigalia* was instituted by Numa 704 years before the birth of Christ. Reddish coloured bitches were sacrificed because the lesser dog star was then in the heavens, and was considered uppropitious to corn.

In the prophet Joel, where the Almighty promises to the Jews, "I will restore to you the years that the locust hath caten, the canker worm and the caterpillar, and the palmer worm,"—this passage is rendered in the Latin Vulgate, "Et reddam vobis annos, quos comedit locusta, bruchus, et rubigo, et cruca." Now, under the head weevil, it has been pointed out in this essay, that one of the most destructive insects injurious to the farmer is the Bruchus pisi or pea weevil, so that the latter part of this passage from the Vulgate may be rendered, "the weevil, the rust or milder, and the caterpillar"—which singularly enough are the subjects of consideration in the present treatise.

The mildew has long been known in Great Britain as one of the greatest scourges of the farmer. A writer in the 9th volume of the Quarterly Journal of Agriculture treating of it says:—" Of all the other diseases which attack our cultivated plants, not one is so destructive as the mildew. It is the plague of our wheat crops. So constantly present is this destructive disorder, that in the fairest fields of wheat, grown in the richest corn districts of England, and in the most genial years, I never saw a single acre entirely unifieded. Every year the farmer is more or less injured by this disease; for the produce of each acre of wheat is unquestionably reduced annually several bushels. Yet those who suffer most by the loss, the farmers themselves, are almost universally ignorant of the fact, and their attention is rarely arrested by it till a year occurs in which their erop of wheat is nearly annihilated."

Opinions respecting the cause of mildew are various. It is ascribed in the writings of ancient naturalists, in the writings of modern agriculturists, and in the opinions of practical farmers of the present day to a number of eauses, some of them very conflicting and some very absurd. As we have seen before, the Romans in the time of Pliny ascribed mildew to the settling of certain ders upon the corn, and to its obtaining a caustic quality from the heat of the sun. Pliny himself ascribed it to cold. The French agriculturists of the early part of last century imputed it to dry gloomy weather, about the time of the corn being at the height of its vegetation. M. Duhamel concurs with this opinion, saying— "I have many times observed that when a hot sun has succeeded dry hazy weather, the corn became rusted within a few days after. The distemper is not