MICROSCOPICAL EXPLORATION SEVENTEEN

CONDIMENTS IN CLOSE-UP

Introduction

Although it might be argued that Micscape Magazine is not an appropriate venue for etymological discussion, it is necessary to define what is meant by 'condiment' in the context of this article.

The term condiment comes from the Latin noun *condimentum*, meaning "spice, seasoning, sauce" and from the Latin verb *condire*, meaning "preserve, pickle, season". The term originally described pickled or preserved foods, but its meaning has evolved over time. In this article the word condiment refers to those mixtures of powdered solids, usually found in jars, which are widely used either sprinkled onto food at the table, or as flavouring during cooking.

The condiments chosen for this brief microscopical exploration are listed below, in bold letters, along with their ingredients in light text:

Celery Salt: Salt, Ground Celery Seed, Anti-caking Agent (Silicon Dioxide).

Chicken Seasoning: Paprika (37%), Salt, Onion Granules (16%), Flavourings (contains Barley, Wheat), Parsley (2%), Maltodextrin, Black Pepper, Cayenne Pepper, Dried Lemon Juice Concentrate, Anti-Caking Agent (Silicon Dioxide), Thyme, Sage.

Garlic Pepper: Dried Garlic (42%), Black Pepper, Red and Green Bell Peppers, Dried Onion, Garlic Oil.

Lamb seasoning: Dried Onion, Mint (17%), Salt, Dried Garlic (14%), Ground Coriander Seed, Black Pepper, Rosemary (8%), Oregano, Sunflower Oil, Anticaking Agent (Silicon Dioxide).

Pork Seasoning: Onion Granules (29%), Ground Coriander, Salt, Sage (10%), Garlic Granules, Sugar, Black Pepper, Parsley (5%), White Pepper, Dried Red Bell Peppers, Anti-caking Agent (Silicon Dioxide), Sunflower Oil. **Steak seasoning:** Black Pepper (24%), Dried Onion, Yellow Mustard Seed (11%), Ground Coriander Seed (9%), Chilli Pepper, Dried Garlic (2%), Ground Ginger, Cumin, Sea Salt, Dried Red Bell Peppers, Bay Leaves, Extra Virgin Olive Oil, Oregano.

Ground Black Pepper

Ground White Pepper

Common Salt

As can be seen above, there are ingredients common to some of the mixtures which can be considered to be condiments in their own right. Those are listed in bold letters at the bottom of the list where I have also included ground white pepper

For the observations a small amount of each of the condiments was put into a separate 7cm. Plastic Petri dish, and viewed as described below.

Observations

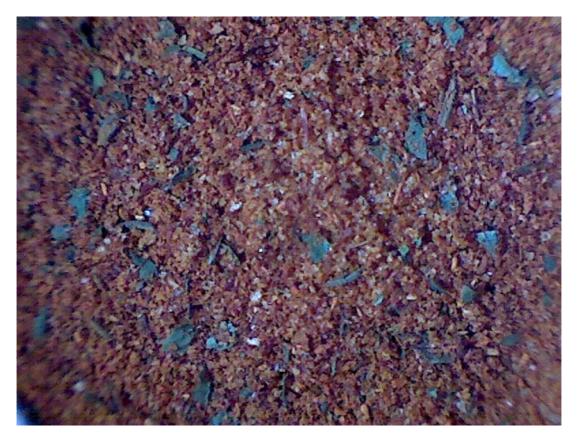
For the first set of images, <u>Condiments x5</u>, each dish was viewed using a ATP model DMS-USB2 digital USB microscope at its lowest magnification and Swift Imaging 3.0 image capture software, which gave an on-screen magnification of approximately x5. The images were captured at a resolution of 1600x1200 pixels.

Condiments x5

Celery Salt



Chicken Seasoning



Garlic Pepper



Lamb Seasoning



Pork Seasoning



Steak Seasoning



Ground Black Pepper



Ground White Pepper



Common Salt



For the second set of images, <u>Condiments x60</u>, each dish was viewed using the x2 objective pair of a Brunel Microscopes MX series stereomicroscope fitted with an Eyecam Plus digital eyepiece camera. This gave an on-screen magnification of approximately x60 and the images were, once again, captured at 1600x1200 pixels resolution.

Condiments x60

Celery Salt



Chicken Seasoning



Garlic Pepper



Lamb Seasoning



Pork Seasoning



Steak Seasoning



Ground Black Pepper



Ground White Pepper



Common Salt



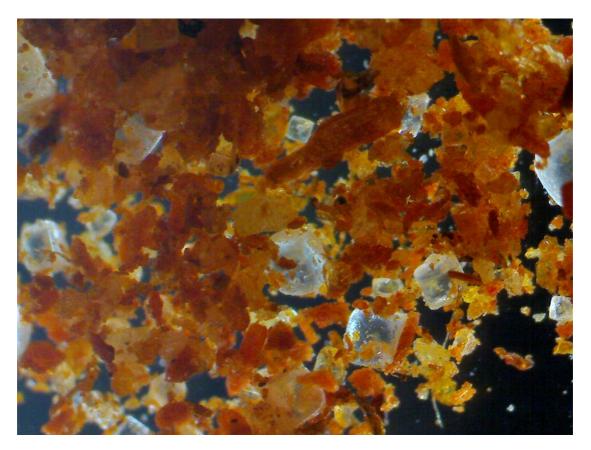
For the third set of images, <u>Condiments DF</u>, the Brunel MX series stereomicroscope was fitted with its dark field attachment and the images captured by the Eyecam Plus and Swift Imaging 3.0 software at a resolution of 1600x1200 pixels as before.

Condiments DF

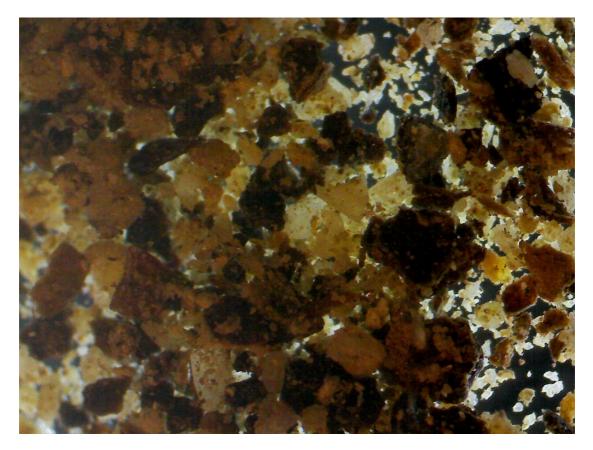
Celery Salt



Chicken Seasoning



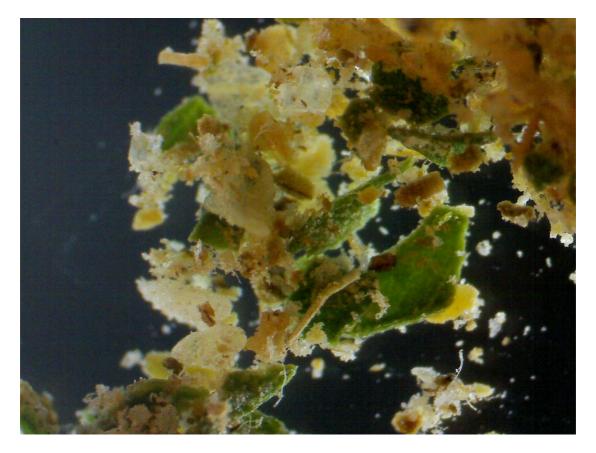
Garlic Pepper



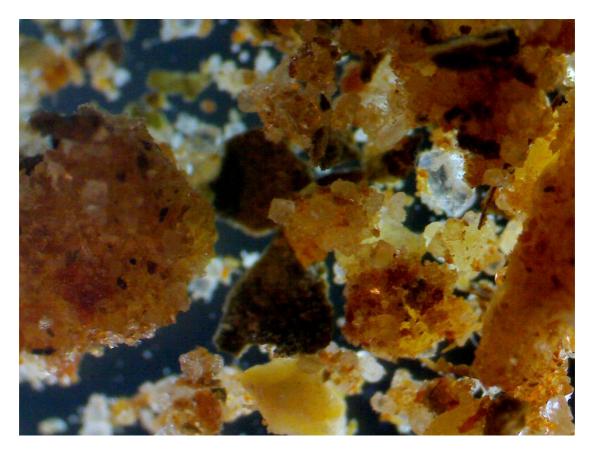
Lamb Seasoning



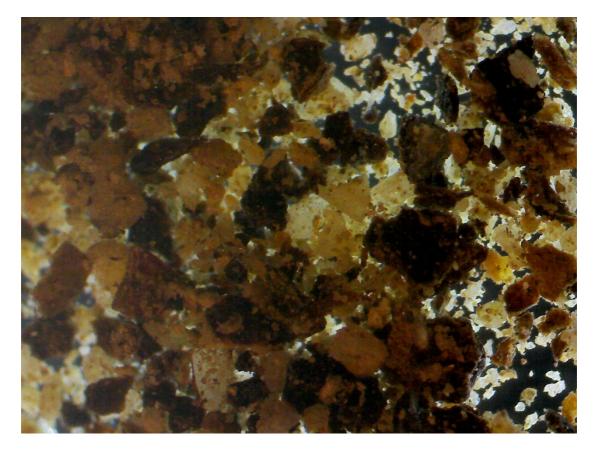
Pork Seasoning



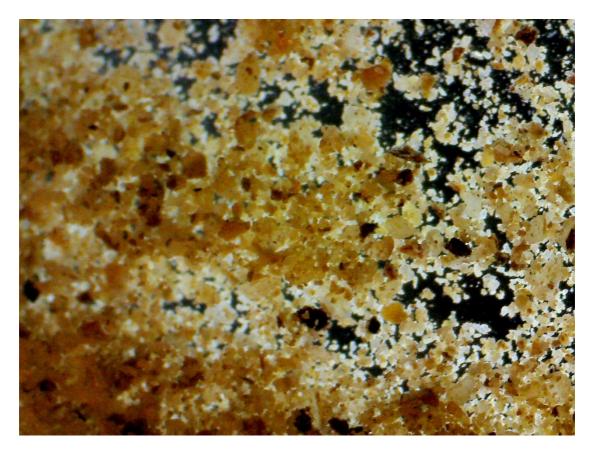
Steak Seasoning



Ground Black Pepper



Ground White Pepper



Common Salt



In Conclusion

The one easily identifiable ingredient, in the above mixtures of which it is a part, is Salt. The identification of any of the other components of the mixtures pictured here is a matter for personal interpretation of these images. **But**,

As we say here in Cumbria:

'Ave a go yersel'!

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