

accurately record them in my databases and also correctly re-label the photographs.

On 9<sup>th</sup> July 2002, I found a Pug in the garden trap that looked different to those I had already photographed. As I was a little bit pushed for time, I didn't attempt to identify it myself. Instead, I took the necessary photographs and 'papered' the specimen for later despatch.

When I had eventually amassed a sufficient number of specimens to make it worthwhile posting them, I transferred the images onto a floppy disk and posted them all off to Brian.

On 6<sup>th</sup> August 2002, I received a list of dissection results from Brian by email. There was a one-line comment at the top, "Have done a batch of pugs. The star was the **bleached pug** - what a beauty!"

Not realising the true significance of this, I passed the Pug records to Ken Saul, intending that they should be included in the batch of records I had only recently submitted for July 2002.

Ken's reply made me sit up take a little more notice. He indicated that if accepted, **bleached pug** could well be a new species for Norfolk. Gerry Haggett was to be consulted, so images of the moth and its genitalia were emailed to Ken so that they could be passed on to him.

On 14<sup>th</sup> August 2002, Ken contacted me again to say that Gerry thought that it was **bleached pug**, a new County record!

Ken asked if higher quality prints of the photographs could be produced and sent to Gerry. I therefore printed out a high-resolution set of top, bottom and genitalia images on photo-glossy paper and sent them off.

A few days later I received a letter from Gerry, changing the identification from **bleached pug**, *Eupithecia expallidata* to **wormwood pug**, *Eupithecia absinthiata*, and explaining in detail his reasons for this.

A brief flurry of activity followed, during which time I advised all others involved about the change of identification. I also ended up having to re-write this piece, as the ending had changed somewhat!

I'm sure Ken will not mind if I quote directly from one of his emails to me, "It's all a bit disappointing, but does go to show that these things aren't always as straightforward as we might wish. It's a measure of things when moth-ers of the calibre of both Brian and Gerry have to weigh things

up in the way they have, and also in their honesty about changing opinions and trying to look at things very objectively." How true.

*Perry Hampson.*

### **Bleached pug *Eupithecia expallidata* in the Eastern counties**

There are no records of Bleached pug from the county of Suffolk listed by Morley in his Final Catalogue of Lepidoptera of Suffolk 1937 nor in Aston's Supplement of additions made between 1937 and 1960. There is similarly no record in Barrett's Lists published in Transactions Norfolk & Norwich Naturalist's Society 1873-1913. No record exists in the Norfolk Moth Group Database updated by Dave Hipperson 1980-1992

There have been, however, a scatter of records of **Bleached pug** from Essex, Suffolk and Norfolk in the last thirty years and the following in chronological order are of those records known to me.

The first date from 1973 when two specimens were listed in the moths taken at the Rothamsted light-trap at Santon Downham on the Suffolk/Norfolk border on 30 July and 4 August; a query about these insects brought the comment "records accepted as other foodplants (than *Solidago*) known - Angelica, Ragwort" One of the specimens retained amongst voucher specimens was said to have had its genitalia examined and found to be female *expallidata*. No further specimens have been listed from Santon Downham in the annual reports of light-trap results since.

Next is a specimen taken by Dewick at Bradwell in 1981 (Lep NE Essex 1992) of which I have no knowledge.

Two examples seen at Languard, Suffolk by Nigel Odin, one in 1994 and another in 1997, were released soon after identification and these must remain possible *expallidata* although in the light of other recent records these may equally have been *absinthiata*.

Currently there are four records. First a moth taken by Peter Clarke at Holme in 2000 of which a very clear, enlarged digital photo was sent to me and which I identified to be the Wormwood pug *absinthiata*. Then one at N. Walsham on 9 July 2002 by Perry Hampson who also sent me fine digital photos and which again I identified to be *absinthiata*. A female moth was taken at the Ipswich golf course in 2001 and a first-class digital photo of its genitalia was sent to me, which I would class to be *absinthiata*. Another Essex specimen noted in 2002 I have yet to see.

There may be two reasons why these reports of **Bleached pug** have come about, firstly because the adult moths are unusual forms of *absinthiata* and secondly because the only moths examined for determination by genitalia have been female.

Although wings are commonly a warm, reddish-brown the forewings are subject to ground colour variations that ranges to pinky-brown. And while the forewings may be often almost unicolorous, markings can be intensified especially at the costa, the antemedian and postmedian lines, while the submarginal whitish dots become bolder and edged black towards the tornus and finally the black discoidal spot can be elongated and thickened.

It is the pale, pinkish-brown moths with darker costal markings and above all the enlarged and elongated discal dot that can be thought to be *expallidata* and this thought is enhanced when, as is the case with all examined specimens, these features are present in the more ample-winged female moths. The Holme 2000 insect was unusual in having whitish lines across the forewing fascia that certainly did not suggest either *expallidata* or *absinthiata* although other features confirmed the latter.

#### **Impression of Adults**

The impression of adult **Bleached pug** *expallidata* is of a pinkish-grey-brown, rounded, broad-winged pug with suppressed wing markings except for a deeply-black elongated, straight discoidal mark with two associated costal blackish wedges. These three features stand out boldly on an otherwise plain, relatively unmarked wing. A postmedian row of tiny black dots is invariably present but is not striking. A submarginal row of dulled whitish curved marks is suppressed except for the tornal spot, which is still not conspicuous.

The impression of adult **Wormwood pug** *absinthiata* is of rich, warm, reddish-brown narrower forewing with a small, rounded or oval discoidal black spot and the adjacent two dark costal wedges are muted or suffused and do not join with the discoidal to stand out as a dominant feature. Its submarginal row of white spots are brightly marked and culminate in a bold tornal spot

#### **Female genitalia**

The bursa of *absinthiata*, *goosensiata* and *expallidata* show such similar ornamentation that when I attempt to relate each to wing colour and markings I find contradiction. In this regard I find the very good digital photos of today are no more (or less) helpful than the text figures of the

British Entomological Natural History publication. Using this medium the insects taken at North Walsham in 2002 and at Holme in 2000 could be determined as *expallidata* whereas the wing pattern is positively *absinthiata* for both. The Ipswich 2001 specimen bursa is more surely *absinthiata* but I have not seen the moth.

#### **Host plant**

Wild Golden-rod *Solidago vigaureata* is well known from the older woodlands of the southern counties where it flourishes periodically under small-wood coppice management or clearance, and also in the western and Welsh counties in old hedgerows, lanes, and at wood edge. However Mike Hall has consulted Simpson's Flora of Suffolk to find that the plant is known from 25 10km squares, and also Beckett and Bull's Flora of Norfolk where 27 locations are scattered over the county and with a more varied habitat that includes heath, wayside, banks and gravelly soil.

However before *expallidata* is assumed from *Solidago* flower-feeding pug larvae it is as well to remember that in the south and west *absinthiata* (as well as *vigaureata*, *centaureata* and, *subfuscata*) larvae can all occur together on *Solidago* flower heads on the same site at the same time of year. Unlike *absinthiata* and *vigaureata* whose wild larvae do feed upon Ragwort flowers, wild larvae of *expallidata* are exclusively *Solidago* feeders. *Angelica* is a most unlikely hostplant for *expallidata*.

Just as we would like to see adult moths believed to be **Bleached pug** so we equally would be glad to see moths reared from eastern counties *Solidago* larvae. Or of course larvae themselves.

#### **Conclusion**

The probability must remain that specimens thought to be **Bleached pug** *expallidata* from the Eastern counties are likely to be some form of **Wormwood pug** *absinthiata* I shall always be pleased to receive specimens or good photo images of moths that any recorder might think to be *expallidata*.

Gerry Haggett

#### **Felbrigg- Tuesday 16 April**

This was the second of the spring workshops and took the form of a larvae hunt. After meeting outside Felbrigg Hall, a small procession of vehicles drove to the west gate and parked just inside the Old Deer Park. From